

Experimental Education Series

EDITED BY M. V. O'SHEA

ENRICHING THE CURRICULUM FOR GIFTED CHILDREN

EXPERIMENTAL EDUCATION SERIES

EDITED BY M. V. O'SHEA

ENRICHING THE CURRICULUM FOR GIFTED CHILDREN.

By W. J. OSBURN, Professor of School Administration, The State University of Ohio, and Director of Educational Research, Ohio State Department of Education, and BEN J. ROHAN, Superintendent of Schools, Appleton, Wisconsin.

FITTING THE SCHOOL TO THE CHILD.

By ELISABETH IRWIN, Psychologist, Public Education Association of New York City, and LOUIS A. MARKS, Member Board of Examiners, Board of Education, New York City.

THE FUNDAMENTALS OF STATISTICS.

By L. L. THURSTONE, Ph.D., Bureau of Public Personnel Administration, Washington, D. C.

GIFTED CHILDREN: THEIR NATURE AND NURTURE.

By LETA S. HOLLINGWORTH, Ph.D., Associate Professor of Education, Teachers College, Columbia University.

HOW TO EXPERIMENT IN EDUCATION.

By WILLIAM A. MCCALL, Ph.D., Associate Professor of Education, Teachers College, Columbia University.

PRINCIPLES OF MUSICAL EDUCATION.

By JAMES L. MURSELL, Ph.D., Department of Education, Lawrence College.

SPECIAL TALENTS AND DEFECTS.

By LETA S. HOLLINGWORTH, Ph.D., Associate Professor of Education, Teachers College, Columbia University.

VOCATIONAL GUIDANCE AND COUNSELING.

By ALANSON H. EDGERTON, Ph.D., Professor of Industrial Education and Chairman of Courses in Vocational Guidance, Vocational Education, and Industrial and Applied Arts, The University of Wisconsin.

ENRICHING THE CURRICULUM FOR GIFTED CHILDREN

A Book of Guidance for Educational
Administrators and Classroom Teachers

BY

W. J. OSBURN

Professor of School Administration
The State University of Ohio and
Director of Educational Research
Ohio State Department of Education

AND

BEN J. ROHAN

Superintendent of Schools
Appleton, Wisconsin

NEW YORK
THE MACMILLAN COMPANY

1931

310
P. 51 E

6920

COPYRIGHT, 1931,
BY THE MACMILLAN COMPANY.

All rights reserved — no part of this
book may be reproduced in any form
without permission in writing from
the publisher.

Set up and electrotyped. Published January, 1931.

PREFACE

IN the autumn of 1921 the senior author delivered an address in Milwaukee on the need for differentiated instruction in our schools. The junior author, who was a member of the audience, became much interested in the subject and expressed a desire to experiment with some form of differentiated instruction in his schools with the senior author as adviser. The project was undertaken and carried through during a period of five years. The progress of the pupils who were subjects in the experiment is still being watched and recorded.

The purpose of this volume is, first, to describe the experiment, together with the philosophy upon which it rests. In addition to this, the material in Part II furnishes detailed information concerning the content of the curriculum so far as more capable pupils are concerned. Special attention is called to the fact that the plan as here outlined can be put into operation in any school or in any one room in a school system. There is no necessity for sectioning in any formal manner and no need for laborious extra assignments on the part of the teacher. Finally, the labor of testing and scoring papers has been reduced to a minimum.

The book is published in the hope that it may stimulate interest in the needs of gifted pupils and be of service to all those who are alive to the appalling educational waste that results when capable pupils are compelled to submit to the grind of the ordinary educational treadmill.

In carrying on the activities which are described in this volume, we have relied upon the coöperation of a number of teachers, pupils, and others. Special mention should be made of valuable services rendered by Misses Margaret Comerford, Dorothy Harris, Mabel Wolter, Ruth Loan, Emma Voge, Alma Bohlmann, Dorothy Hart, and Viola Pelzer, Mrs. Mabel Meyer, and Messrs. Robert Wood, H. L. Post, Arthur Howe, and Richard Nelson. To all of these we wish to express our sincere thanks.

W. J. OSBURN
BEN J. ROHAN

TABLE OF CONTENTS

	PAGE
PREFACE	v
EDITOR'S INTRODUCTION	ix

PART I

PRINCIPLES AND POLICIES

CHAPTER		
I.	THE NEED OF A BOOK ON THE EDUCATION OF GIFTED CHILDREN	3
II.	EDUCATION OF THE GIFTED IN A DEMOCRACY	13
III.	FUNDAMENTAL DIFFERENCES BETWEEN CAPABLE AND DULL PUPILS	20
IV.	GUIDING PRINCIPLES IN CURRICULUM CONSTRUCTION	38
V.	PRINCIPLES OF METHOD	56
VI.	HOW TO DISCOVER THE GIFTED, SUPERIOR, OR TALENTED PUPILS IN SCHOOL	75
VII.	CAPITALIZING THE INTERESTS OF GIFTED PUPILS	99
VIII.	THE EDUCATION OF THE GIFTED — ORGANIZATION AND ADMINISTRATION	113
IX.	THE EDUCATION OF THE GIFTED — EXTRACURRICULAR PROGRAM	142
X.	THE OUTCOMES OF THE PROGRAM IN OPERATION	180

PART II

MATERIALS AND METHODS

XI.	RADIO CLUB	195
XII.	NEWSPAPER CLUBS	232
XIII.	FORESTRY CLUB	266
XIV.	NURSES' CLUB	287
XV.	MECHANICS' CLUBS	307
XVI.	SALESMANSHIP CLUB	318
XVII.	TEACHERS' CLUB	340
XVIII.	ARTS AND CRAFTS CLUB	374
APPENDIX		395
INDEX		403

EDITOR'S INTRODUCTION

It is not necessary to dwell long here upon the need of a volume like *Enriching the Curriculum for Gifted Children*. Educational administrators, teachers, and even parents are troubled by the problem of providing adequately for children who are endowed by nature so that they can progress more rapidly than their classmates in the mastery of the knowledges and the skills taught in the schools. One cannot attend an educational meeting or a parent-teacher association conference to-day without having an opportunity to listen to a discussion of this problem. It is generally recognized that the children in the schools are not equally capable intellectually; and we are beginning to agree that, so far as we can do so, we ought to take as much pains to develop the talents of the above-average child as those of his less fortunate classmates. The authors of this volume have cited abundant evidence showing that gifted children may be found in every normal classroom. It is shown also that, if pupils who can perform intellectual tasks more rapidly than most of the members of their classes are not kept occupied in interesting activities while their classmates are completing the regular work of the classroom, they will acquire mental habits that will be of disadvantage to them later, and they may even become disturbing elements in the school, devoting their talents partly to creating disorder instead of employing them in constructive activities.

Many superintendents, principals, and teachers who would like to make proper provision for gifted children are not able

to do so because they cannot organize special classes for exceptional pupils and they feel that the regular work of the classroom must be determined by the needs, abilities, and interests of the less well endowed children. It has not been generally thought that the needs and interests of gifted children could be ministered to under ordinary classroom conditions without sacrificing the welfare of the majority of the pupils. The authors of this volume give the results of an experiment continued over a number of years in which it has been demonstrated that pupils who are superior in the intellectual work of the school can be provided for without the organization of special classes or without the disruption of a program worked out for the benefit of pupils who can progress only at average speed.

The authors first discuss the principles underlying a program of work adapted to the interests, needs, and abilities alike of average and of above-average pupils. Then they present the steps leading up to the experiment, which was carried on in the schools of Appleton, Wisconsin. It is shown in detail how the regular schedule of work in the schools of Appleton was carried through, but how at the same time provision was made for gifted children so that their interests were gratified and their energies were expended in profitable ways — all without imperiling in any way the educational advancement of the normal pupils. Finally, the authors present detailed programs showing how the plan of taking care of gifted pupils was carried through as a supplement to the regular classroom work.

The experiment described herein extended over a sufficiently long period to show that it was entirely feasible, that the work made a strong appeal to the above-average pupils, and especially that the results were in all respects most gratifying. This program, then, is confidently offered to all superintend-

ents, principals, teachers, and perhaps parents who wish to make proper provisions for well endowed children so that they will not form wasteful mental habits in the schools by marking time for pupils who cannot progress as rapidly as they can do.

During the last few years, much of the discussion of the treatment of superior pupils in school work has had to do with the disadvantages of segregating gifted pupils so that they become differentiated as a group from their classmates. It has been felt that, while this plan might have some advantages so far as the intellectual development of the gifted child is concerned, it might have and probably would have serious disadvantages for him socially. Our people are not willing to adopt a program which requires that class distinctions of any sort be set up among the children in the schools. Objection has been made also to permitting the swift-moving pupil to proceed as rapidly as his talents will enable him to do through the elementary and high school, because in so doing he loses contact with children of his own age who are on a par with him in many respects but inferior to him in rapidity of intellectual development and because he is brought into contact with classmates who are older than he is and to whom he is not able to adjust himself happily. In recent literature relating to this matter, there are plenty of concrete instances of social maladjustment arising from too rapid progress through the schools by gifted children. Superintendents, principals, teachers, and at least the more observant parents are not willing to take children gifted intellectually out of their normal social environment and place them where they will be ill at ease or even socially isolated. The plan described in this volume obviates both the difficulties mentioned, since it does not remove gifted children from their proper social groups but it does provide adequately for their intellectual develop-

ment in accordance with their interests, their abilities, and their needs.

It is more important to-day than it has been heretofore in American life to provide activities for well endowed children so that their time and energy will be absorbed in interesting, constructive, developmental activities. The world outside the schoolroom is making an alluring appeal to the young, particularly to those who have unoccupied time on their hands and who are not required to concentrate on intellectual tasks. From every section of the country come complaints from teachers to the effect that commercialized amusements are seducing pupils, so that they are becoming more interested in out-of-school activities than they are in their intellectual tasks. This problem is as serious and as important as any that is confronting superintendents, principals, teachers, and parents in contemporary American life.

The chief problem of any people is to keep the younger generation, especially the more capable members thereof, in an eager, learning attitude long enough to acquire the wisdom, culture, and skills accumulated by their predecessors in their experiments in the art of living. As a people grow older and wealth and opportunities for self-indulgence increase, there has always been in other times and places, and there still is among us, a tendency for the young to become indifferent too early toward mastery of the knowledge and the achievements essential to the continued stability and prosperity of a people. Nations once capable, powerful, stable have passed out of the picture completely or are in a state of decay to-day, largely because the abler of the young people have not been or are not now plastic, teachable, and docile long enough to become possessed of the knowledge and skills transmitted to them by their forbears.

The tendency of all peoples as they grow older is to become

congested in urban centers, with the result that the young become unduly stimulated and emotionally excited by things of only immediate or temporary value. They seek gratification of elemental impulses and become increasingly callous to the appeal of unemotional intellectual achievement. The schoolroom is likely to become a dull, uninteresting place to them. Among some gregarious peoples where children are incessantly acted upon by exciting influences, it is impossible to hold the brighter of the younger generation in the schools until they attain the grade in knowledge, skill, and self-control reached by their ancestors.

The young in the United States are going the pace faster to-day than young people have probably ever gone before. Jazz influences are playing upon them in a way and to an extent that should receive the earnest attention of educators, parents, and all who are interested in individual and social well-being. Already it is possible to observe children even in the graded schools who are *blasé* and sophisticated and resistant so far as intellectual growth is concerned. They are in danger of losing too early their eagerness and enthusiasm for knowledge and achievement, which are essential for the perpetuity of our civilization.

Our children are becoming crowded in rushing cities. Rural schools all over the country are being closed because there are no pupils for them, while it is impossible to build school-houses fast enough in the cities to take care of the rapidly increasing school population. Amusements of a highly emotional character for the young are multiplying at an unbelievable rate. Our entire program of out-of-school life so far as the young are concerned is tense, exciting, overstimulative, so that our children are coming to a head too early, just as children have done and are now doing in other countries. This is why it is imperative that the school should devise ways

and means of interesting the young in intellectual activities and keeping them profitably occupied so as to protect them from the allurements and excitements of the world in order that they may grow intellectually long enough to acquire the culture, knowledge, and skills that should be conserved. *Enriching the Curriculum for Gifted Children* shows how pupils of superior ability may be kept interested in intellectual pursuits in the school to the end that may develop their powers to the full, for the good alike of themselves and of society.

M. V. O'SHEA

THE UNIVERSITY OF WISCONSIN

PART I
PRINCIPLES AND POLICIES

ENRICHING THE CURRICULUM FOR GIFTED CHILDREN

CHAPTER I

THE NEED OF A BOOK ON THE EDUCATION OF GIFTED CHILDREN

FROM one point of view, the most useless thing of all is to write a book about educating gifted children. We are told that the gifted child is better able to take care of himself than anyone else. He will learn without a teacher and even in spite of one. So why write a book about him?

But there is another side to the question. In the first place, granted that gifted children can learn without help, the fact remains that they are not left to themselves. They are not allowed to remain out of school, as was Lincoln, and educate themselves without a teacher. Worse still, they are not allowed to learn in spite of the teacher. In the ordinary school the rule for the gifted child is: "This much shall you learn, and no more. If by chance you get through with your lesson before your fellows are through, fold your hands and wait quietly until all have finished studying."

Such a procedure is deadening and very few pupils are bright enough to survive its withering effect. As a consequence, the real substance of the education which our gifted pupils are receiving is habits of idleness and laziness. Under

such conditions all gifted children are in grave danger, because inertia is a characteristic of death. Activity is the symbol of life and growth.

To get a clear picture of how self-activity is denied the gifted child in the ordinary school, let us look into the conditions somewhat in detail.

During the last decade rapid progress has been made in the scientific methods of measuring what children do in their studies. The test results have corroborated in a very striking manner what everyone has long known and have proved conclusively that intellectual differences are very much greater than was suspected even by the teachers. This fact can be shown in any school by the following simple experiment:

Ask all the pupils in any class to open their readers to a certain page and to place them immediately face down on the desks. Then say: "I want to try a little experiment in reading with you to-day. Get your pencils ready." When this has been done say: "When I give the signal please take up your books and begin reading on page — (locate the place as accurately as possible). I want you to read as quickly and as carefully as you can until I say, 'Mark.' When I say, 'Mark,' please draw a line under the words at which you are reading and place your book on your desk immediately, *face down*. Are there any questions?" Answer all relevant questions and then give the signal to begin. At the end of just sixty seconds say, "Mark where you are reading and put your book face down on your desk." (See that everyone does this.) Then ask the children to write a story of what they have read or have them answer some previously prepared questions. When all have finished writing take up the papers and have the pupils count the number of words they have read. Get reports from all the pupils and compare them. The results are always amazing to one who has never tried the experiment

before. Often you will find that the fastest reader has read seven or eight times as much as the slowest one; and, what is even stranger, when you look at what the children have written, you will find that the fast pupils have usually remembered as large a proportion of what they have read as have the slower ones. Similar results will be obtained in arithmetic and other subjects. All this means that an assignment that requires forty minutes from the slowest pupil will be mastered equally well and even better by the fastest pupil in five or ten minutes. These are the facts in the case and they are verifiable in any school or group of adults.

In view of facts so generally known and so easily demonstrable as these, it would seem that school patrons, officials, and teachers would govern their actions accordingly. Do they? Let us see. The people in every city and village tax themselves to build schoolhouses. In these buildings they construct recitation rooms that will seat as many as forty or even more children, who are to constitute a particular grade or class. Teachers are employed to teach each particular group. On the first day of school the teacher meets the class and makes an assignment — *one and the same* assignment to every pupil — and this process is repeated from day to day until a merciful vacation puts an end to the whole stupid process. From beginning to end each child is viewed as one-fortieth of a unit that is the class or grade. The child who can read the assignment in forty minutes has just as many pages to read as the child who can read it in ten minutes. If the fast reader has to spend an hour in the study of all his lessons, the slow pupil will be compelled to spend four hours or come to school next day without knowing his lessons.

The school day usually consists of about five and one-half hours. The pupils spend approximately one-half of this time reciting what they have learned in the other half. Teachers

are supposed to adjust the length of their assignments to the rate at which the average child can study. They therefore assign enough to keep the average child at work for something like two and one-half hours. But the fast pupils can do this work in one hour, while the slowest ones are compelled to spend at least five hours on the task. What does the gifted pupil do during the ninety minutes that he has left over every day? The answer is easy. He either marks time or disturbs the other pupils. The slowest pupils must study every minute at school and two and one-half hours every night at home in order to keep up. They have absolutely no time to go anywhere at night. Their lives are a continual grind from day to day and week to week. They have no hours of leisure, no opportunities for social activities, and often no chance for physical exercise. Worry often prevents rest, even when they retire, and broken health is unavoidable. Their only alternative is failure and that is usually the outcome of the whole miserable business, unless the kind-hearted teacher, dimly realizing that something is wrong, promotes them anyway.

The other half of the school day is devoted to recitations. For most schools this word should be written *re-citations*. Each child is supposed to have somewhere in his head a tank or receptacle in which he stores the information that he gains during his study hours. The class period is provided in order that the teacher may ascertain how well this storage process has been carried out. She does this by having each pupil re-cite what he has stored up. This constitutes evidence that he has really studied. Such is the theory upon which most of our schools are still conducted. In practice, however, the scheme is little better than a farce, because there is not enough time to permit every pupil to recite all that he has learned. A few samplings are all that the teacher has time to pump

out. If the recitation period lasts thirty minutes, the teacher can hardly be expected to ask more than forty questions. These are divided more or less evenly among the forty pupils. If each of the forty pupils was to recite all of the forty answers, the teacher would have a perfect chance to find out just how well each pupil had done his work. But when each of the forty pupils answers only one of the forty questions, the teacher has only one-fortieth of a perfect chance. This means that, if a teacher asks 1600 questions in the manner just indicated, she is entitled to infer that she has asked only once the right question of the right pupil. No gambler would take such a chance and no business enterprise could possibly run upon such a flimsy basis.¹

But the entire futility of this procedure is not yet evident. If a class of forty pupils spends two and one-half hours in recitation during each day, each pupil recites only one-fortieth of the time. In other words, he spends 150 minutes each day in class and recites for only four minutes. How does he spend the other 146 minutes? The answer is evident. *The time is wasted.*

During the study periods it is possible that half the pupils may spend all their time profitably, without overstrain. For one-fourth of the class the study periods are a mystifying grind, while for the remaining fourth they are an intolerable bore for at least half the time. Are there words in the English language that can properly characterize the colossal stupidity

¹ It is fair to mention that in many schools the teachers feel the futility of this procedure and cut down their assignments so that the slowest pupil can get his lessons in two and one-half hours. In such circumstances the average pupil can finish his work in about one and one-fourth hours, while the fast pupil can get through in about thirty minutes. Under this plan ten per cent of the class works up to capacity throughout the study period, eighty per cent wastes one and one-fourth hours, while the remaining ten per cent has two hours to be disposed of.

of it all? Yet taxpayers are spending hard-earned money and earnest teachers are devoting the best that is in them to the perpetuation of such a system.¹

In preceding portions of this chapter we have presented the well known facts concerning the differences among children and we have described the stupid school procedure that is still in vogue in most of our schools. The reader who has persisted thus far will surely wonder how such a situation ever arose and why it is permitted to exist. The remainder of the chapter will concern itself with a partial answer to these questions. Some features of the answer that are related to fundamental conceptions of democracy will be considered in the next chapter. Only the more superficial phases of the questions will be considered here.

The whole phenomenon is an excellent illustration of how humanity persists in doing futile things when it knows better. Our emotions, feelings, beliefs, and prejudices continue to obscure our knowledge and reason. There are certain non-rational motives in human behavior that are to blame in this case. First and foremost among these we must place our innate dislike of changing our habits. We are creatures of habit and have a marked tendency to like to do things in the way that they have been done, particularly when the old way has been successful and adequate for a time. In early days in this country the schools were very small, partly because of the small population and partly because all the pupils had to pay

¹ To many of our readers the above picture will seem overdrawn. They will point out that there are many school systems in which conditions are infinitely better than those here described. This is true and it is not the wish of the authors in any wise to belittle the splendid efforts that are being put forth in many places to avoid this intolerable condition of affairs. We wish to point out, however, that the majority of the school children in the United States are still attending either one-room schools or small village systems. A few visits to these schools will convince anyone that the conditions pictured above are not overdrawn.

tuition. There were no classes, because no two pupils were near enough together in their work to constitute a class. Furthermore, the attendance was so small that the teachers had time to test out each pupil individually over the whole lesson. This procedure was quite adequate and satisfactory for those days and soon came to be habitual. But new factors and needs are continually thrusting themselves upon us and making our old practices inadequate. In this particular case more people moved into the school districts, more and more children attended school, and it became physically impossible to hear all of the lesson from every pupil. As the population increased the number of children whose parents could not afford to pay their tuition in school increased greatly. In the large cities these ignorant children soon became a menace to the young nation. Something different had to be done. In this emergency the monitorial schools were introduced into this country from England. Under this system one teacher was able to take care of as many as 500 pupils. The plan was as follows: about fifty of the brightest and oldest pupils were designated as monitors. They took the remainder of the pupils, in groups of ten to each monitor, and heard their lessons under the general direction of the teacher in charge.

This was the beginning of the present grade system. Now the head teacher is called the superintendent or principal, and the monitors have become classroom teachers. The number under each teacher has increased from ten to forty or more. Instead of the old barracks-like monitorial school buildings without partitions, we have the modern schoolhouse with its numerous rooms. The capable pupil is now submerged in the class. He no longer stands in front of it as a monitor. In the meantime the habits of the people have slowly and painfully changed. After a protracted and laborious struggle, we have fallen into the habit of voting taxes for school purposes

and it is no longer necessary for poor children to do without an education because their parents are unable or unwilling to pay their tuition. This change was epochal in character, but even now there are people who know very well the value of an education who nevertheless go to the polls and vote against the school levy. A willingness to spend one's money to educate the children of other people is a late product in our civilization, which has been attained through an age-long conflict with the irrational feeling that all our money should be spent to satisfy our own selfish desires of the moment.

The notion that one is entitled to buy just what one wants without regard to the welfare of others is still a potent force. While it cannot prevent the establishment of free schools, it can and does prevent their full growth and expansion. Teachers who are trained to provide for the individual differences of all their pupils are relatively expensive. This is also true of the equipment that is needed. More money must be spent on libraries, laboratories, and textbooks. The rational and scientific belief in the significance of individual differences is in deadly conflict with the irrational prejudice against spending one's money for the general welfare of all.

Another prejudice that is a powerful force in the maintenance of the *status quo* is the feeling that, since all must contribute to the school, it necessarily follows that each pupil should derive equal benefit from the school. This idea is transferred from the business world. When we go to the store the poor man's dollar buys as much as the dollar of the rich man. This is of fundamental importance in the economic world, and to the unthinking it would seem to apply also in the school. A little reflection, however, shows that such is not the case. In the world of ideas it is strictly true that "to him that hath more shall be given." The child who is poor in talent does not receive as much from the school as the child who is

richly endowed. To some this seems unfair, but it is an unalterable fact. The reason for its existence lies in the ultimate realities, which we cannot fathom. The reasons for inequality of talent are just as inscrutable as the reasons for the presence of sickness, suffering, and death in the world. These things are very real and equally mysterious. All we can do is to face them. The child who is lacking in talent has to suffer because of that defect. Furthermore, the child who is very talented in a narrow field is often at a like disadvantage. Most of our schools are not fitted to meet the needs of those who are talented in music only or in art only. Such children, like those who are "born short" in every respect, are doomed to receive relatively meager benefit from the school as now organized.

Such are the facts in the case. But prejudices are blind. They know nothing of facts. Hence it often happens that a feeling arises that the capable child should not be permitted to profit more from the school than does his less favored brother. When he does so, in spite of the difficulties with which he is surrounded, there is a strong feeling that he must be injuring his health and sending himself to a premature grave. Any peculiarities that he possesses are magnified and we have the notion that talented children are always freakish and one-sided. If the capable child shows no abnormal characteristics, the feeling often degenerates into one of pure jealousy and the prediction is made that such and such a child will never amount to anything.

These are the forces that are behind the lock-step and treadmill system that is now dominant in our schools. From the standpoint of prejudice and irrational thinking the schools are for the most part just what they should be. But there are many people who see the matter in a much different light. To them the purpose of the school is to furnish to every pupil

a chance to do the best he can. The slow pupil is not to be neglected. On the contrary, every known means is to be utilized to remove the disabilities and handicaps under which he labors. In like manner the capable pupil is to be encouraged to develop the best that is in him. His school life must not be one dreary round of loafing while the slow pupil catches up. He must not be trained in idleness and shiftlessness merely because he never has enough to do. He, too, must know how it feels to pull hard at a worth-while task. Furthermore, the leaders of to-morrow are the capable pupils of to-day. To allow the leadership of to-morrow to suffer because of the irrational sentiment and blind prejudice of to-day is both dangerous and deadly. The best talent that we possess and the best training that we can give it will be none too good. Whatever stifles talent or interferes with its growth must be removed. *The lock step in our schools must be broken up.*

Freedom from the lock step requires two things: there must be a remedial procedure for the slow and an adequate means of supplying enough of the proper material for the stimulation and education of the gifted. The main purpose of this book is to set forth as clearly and concisely as possible one method of dealing with capable pupils. The program to be described has now been in operation for five years under the supervision of the authors. Its success has been so marked and the technique of its administration has been so simplified that it has seemed worth while to set it forth in some detail in the pages which are to follow, in hope that it may prove usable or at least suggestive in other localities.

CHAPTER II

EDUCATION OF THE GIFTED IN A DEMOCRACY

IN the introductory chapter attention was called to the present practices in school procedure that do not rest on a basis of fact and that are nevertheless maintained and kept in *status quo* as a result of popular prejudice and irrational feeling. Before proceeding to a discussion of the detailed solution of the problem, it is needful to stop and attempt to get our bearings properly. If the present system is wrong, how and wherein are beneficial changes possible? This cannot be determined intelligently without getting clear ideas as to what our aims should be. It was pointed out in the preceding chapter that there are many people to whom the education of the capable has no unique meaning. For them such education involves as total elements problems that are in no way different from the problems involved in the education of people in general. The cause of this belief is not difficult to find because it is closely involved in the warp and woof of democratic ideals.

For more than a century and a half this nation has been engaged in an experiment in self-government. This experiment had its origin in a strong reaction against all those institutions that seek to emphasize and perpetuate differences among men. The fathers of the nation were not in entire agreement on the matter, but the ideals of democracy prevailed to a large extent. These ideals may be briefly characterized by the terms liberty, equality, fraternity, and indefinite perfectibility. These concepts were and are in a very

true sense idealistic. None of them has been fully attained but progress has been made in all of them. The Constitution with its Bill of Rights has gone quite far in "securing the blessings of liberty and in the establishment of certain 'inalienable rights.'" The passing years have brought with them, too, a strong sense of social solidarity and citizenship among the people of the United States. The resulting spirit of brotherhood is extremely strong, as the presence and realization of a common danger always demonstrate. With equality and indefinite perfectibility the progress has not been so marked. This is because these two ideals are to some extent antithetical. The principle of equality is strongly set forth in the Declaration of Independence and strongly reiterated in the Gettysburg Address, but the idea of indefinite perfectibility has received far too little attention. This is a natural result of the dilemma in which democracy finds itself. Perfect equality and entire freedom to improve oneself cannot exist together, and yet both are fundamental democratic ideals. It was shown in the previous chapter that individual differences are fundamental. From this it follows that equality among men is a chimera. Even if this equality could be once established in some miraculous manner, it could not be maintained because different individuals improve at different rates. Some would soon be far in advance of others. Thus it happens that democracy finds one of its cardinal principles at variance with well known facts and in opposition to another cardinal principle of equal importance.

Several suggestions have been made by way of compromise in this embarrassing situation. All of them attempt to attain a reasonably practical working hypothesis by attempting to redefine equality. All agree that intellectual, social, emotional, and economic equality are alike impossible. Some would limit the meaning of the term to political equality, as

evidenced in equal suffrage for all and equal rights of all in court and elsewhere. This conception of equality seems attainable in the long run, but it has not yet been attained in reality.

From another source an effort has been made to harmonize the two ideals by substituting equality of opportunity for equality in general. Equality of opportunity is yet very far from realization and can never be attained completely without fundamental changes in our social organization and a tremendous increase in human knowledge. Its complete attainment would necessitate identical environment and identical heredity for all, both of which seem out of the question.

In spite of the difficulties involved, however, there is hope in the attempt to redefine equality, particularly so in that type of redefinition that tends to emphasize indefinite perfectibility.

The situation is still further complicated by the fact that people in general do not sense the lack of adjustment involved in the situation. They do not realize that they believe strongly in contradictory principles. They believe pretty generally that all children are entitled to an education, and they support a school system that is expected to be a broad and uninterrupted highway from the kindergarten to the university. They assume that they have thus provided for the realization of both ideals. They realize that equality of opportunity does not guarantee equality of progress along the broad highway, but this is universally explained as due either to lack of application on the part of the pupil or to failure on the part of his teachers. "If his teacher is any good and if he applies himself, any child can travel the whole length of the broad highway." "There are no deficiencies of talent that may not be made up for by hard study and good teaching." "Anyone who can get through the gateway of the alphabet can get anywhere along the road to learning." Some even go so far as

to wish to prescribe identical courses for all. Every discerning thinker will realize the futility of all these statements; *but to most of the taxpayers they are law and gospel*, and the day seems to be fast approaching when the wishes of the taxpayer will become more and more a force to be dealt with.

In circumstances such as these, how fares the capable child? According to the ideal of indefinite perfectibility, he should be pushed to the limit, while according to the principle of equality he does not even exist. In accordance with the first ideal, the capable child is the best hope for the leadership of to-morrow. In accordance with the second, every man is a potential leader. From this the principle of rotation in office follows immediately. If all are equal, then all should have a chance to lead, teach, and preach. Indefinite perfectibility requires broader, deeper, and more extensive education for the gifted. Equality brings to pass the lock step, where all children study the same material for the same amount of time, at the same rate, by the same method, and under the same organization and administration. Thus democracy tends to become synonymous with mediocrity. Stupidity means laziness or perhaps the misfortune of having a poor teacher. Brilliancy means overwork and snobbishness.

The authors of this book believe in the rights of the capable to growth up to their limit of improvement. The fact that limit of improvement for the gifted is much more advanced than is that of the stupid and mediocre does not disturb them. They believe that the stupid, mediocre, and gifted should each have an opportunity to improve to their own particular limits and at their own particular rates without reference to the total amount gained. They believe in varied methods of procedure, with diverse types of organization and administration. They believe in rewarding honest effort wherever it is found, regardless of the amount of the reward. In their

estimation, it is wrong to expect stupid children to attempt tasks that are beyond them and equally wrong and much more disastrous socially to subdue and suppress talent and force capable children into the lock step. Initiative, resourcefulness, and adaptability are great qualities peculiarly essential in a democracy, and the lock step in school organization is an excellent means of inhibiting them.

On the other hand, these qualities, great as they are, must not be purchased at too high a price. The lock step is an undesirable aftermath of a revolt from something even worse than mediocrity. Most of our forefathers were exceedingly anxious to avoid the caste system in social organization. To them the oppression of upper classes was most distasteful. They wished to do away with all social stratification. They succeeded in doing away with the caste system as such, but their success was not complete. We still have social classes and shall probably have them always. We like to coddle ourselves into the belief that we consider the street sweeper and the day workman as respectable as the professional man and the statesman; but that is a delusion. No one really thinks of inviting the street sweeper and car conductor to sit on the rostrum with the visiting celebrity. That honor goes to the business and professional men. The street sweeper knows this perfectly and has usually given up all aspiration to such honors. But he has one thing of tremendous importance. Street sweeping is not an hereditary occupation in this country and it is entirely possible and even probable that the street sweeper's children will rise to a high point in the social scale. On the other hand, neither the mayor nor the minister has any special guarantee that his children will occupy as high a position as he himself holds. They may do so, but it will be owing to their own efforts and not to inherited rank. These are tremendous gains over older systems of social stratification

based upon the accident of birth. These gains have been made at the cost of long struggle and bloodshed. They must not be sacrificed. No new system of school organization can succeed that fails to conserve these gains. The education of the capable must be accomplished without building up a system of inherited social caste. Equality of opportunity must be the ideal for each generation.

The principle of equality also implies another principle of fundamental importance. If democracy is to survive, it must be founded upon an adequate basis of like-mindedness. There are some things which every child must learn if it is at all possible for him to do so. A population that is utterly at variance with itself cannot support a democratic form of government. There must be a common fund of knowledge, ideals, and aspirations if the social structure is to possess solidity. Within this realm all children are in a sense equal. Each child has an equal right to mastery here, and the proper mastery of this field is an excellent preventive against snobishness upon the part of those who can go beyond it. The talent that enables a capable child to master more than the minimum essentials involves responsibilities. Such a child by virtue of his broader knowledge and keener insight must take upon himself the responsibility of leadership. Upon his shoulders will fall the task of remaking and extending the stock of common ideals for the generations that are to come. He it is who must interpret and express the "inarticulate aspirations" of his generation. His keen insight will enable him to anticipate new problems and contribute his mite to the modification and popularization of a new common stock of knowledge, ideals, and aspirations that will promote social solidarity and adjustment in the new world of to-morrow.

Such is the nature of leadership in a democracy and such is the high destiny to which the capable pupil should attain.

For such a career, much preparation is needed. It is folly to expect the leaders of the future to somehow stumble into their proper place in the world. It is true that humanity has a way of muddling through, and capable pupils can take care of themselves so far as the mastery of the present stock of human knowledge is concerned. The best of them may even stumble upon contributions to the total stock of knowledge, but the process is exceedingly wasteful and dangerous. Civilization is growing ever more complex and its problems are more and more difficult. The repression of talent is therefore suicidal and the *laissez faire* policy is little better. Leadership and constructive thinking are not inconsistent with the true ideals of democracy. On the contrary, they are absolutely essential to its survival. The capable pupils of to-day must become the leaders and thinkers of to-morrow. Their education must be guided intelligently and with the keenest of insight. The nation needs capable pupils and the capable pupils need the right kind of help. It is high time that the help be supplied.

CHAPTER III

FUNDAMENTAL DIFFERENCES BETWEEN CAPABLE AND DULL PUPILS

If plans for the education of the capable are to be sound and intelligent, they must rest upon a foundation of facts arising from an adequate knowledge of the characteristics of capable children. We must know what facts are peculiar to capable children and characteristic of them. We must know also which of the peculiar characteristics of capable children are most valuable as a basis of our plans for the education of these children.

Facts concerning the characteristics of capable children are rather plentiful. In fact, they are so plentiful that the ordinary school administrator is likely to become hopelessly confused when he attempts to use them as a basis of educational procedure. At the very outset it is obvious that a satisfactory procedure cannot be based upon all of them. Foundation stones are too plentiful. Some of them must be rejected, and the task of selection is not easy. It is quite possible that more than one set of stones might serve as a satisfactory foundation. But one thing is certain — some sort of selection is necessary.

In the experiment to be described in the pages that follow the authors have made a selection. The program as a whole is based upon two facts concerning capable pupils, namely, their unusual ability to perceive likenesses and differences and their general tendencies toward activity. These facts

are set forth *hypothetically* as a proper basis for the education of gifted children. Final judgment concerning the validity of the hypotheses must be reserved until further experiments have been made. In the meantime, it is proper to set forth some of the factors that determined this particular selection. We shall consider the ability to see likenesses and differences first.

Capable children are always characterized by the depth and variety of their interests. At first sight this characteristic seems important enough in itself to serve as a basis of our educational procedure. But when we come to consider interest more critically we find that it is not fundamental in character. It is always a function of variety, increasing as variety increases. Monotony, or the absence of variety, is always the source of boredom. Furthermore, it is common knowledge that some people are vitally interested in things that are an intolerable bore to others. In other words, some people perceive fascinating variety in situations that to other people represent only deadly monotony. Stated still differently, some people perceive likenesses and differences that are forever concealed from others. The capable person is he who by nature sees variety where others see only monotony. For the same reason capable persons have strong and varied interests.

The relation between interest and attention has long been recognized. When we are interested in something we naturally give our attention to it. Capable children, having strong interests, are likewise strong in their ability to exclude irrelevant elements and concentrate upon the thing in hand. The ability to see likenesses and differences plays a dual rôle in this concentration. The person who can perceive likenesses and differences is always sure of that which is irrelevant. He is therefore free from the continual intrusion of irrelevancies

under the guise of things that are important. On the other hand, there is a fascinating variety in the focus of the attention. One fundamental difficulty with the dull person is his blindness to the variety that surrounds him. In a very real sense, the dull person is one who has eyes but sees not.

It is of interest to note that the trouble with the dull person does not lie in the breadth of his attention span. When it comes to repeating digits and nonsense syllables and remembering details the dull person is much at home. Indeed, he may excel his more normal brother in activities of this sort. But the dull person fails to learn — and this is the heart of the matter — because he has no sense of the relationship between the elements of his attention span. He sees no differences upon which he can build a classification. His learning is forever disorganized, a mere collection of abracadabra.

The effect of this condition of affairs is well known to every teacher. When it comes to repeating the language of the textbook the mediocre and dull pupil is a pleasant fellow to have around. He can tell you just when the battle was fought, how many men were killed, how many were wounded, and many other details that he has learned; but to save his soul he cannot outline his history assignment. He can remember and repeat long series of digits, but his notions of the place value of numbers is either vague or entirely lacking. He may be taught to divide after a fashion in an example like $173 \overline{)1584}$, but he will succeed, if at all, by mere rote memory. To him the divisor is just 1, 7, and 3. If it were 731, he would scarcely notice the difference.

With the capable child the case is quite different. He can learn the meaning of place value and estimate with considerable accuracy the relative weights of 1, 7, and 3 in determining the quotient. The capable child easily perceives the organization of the material that he is required to study. He

avails himself of the logical method of memorizing and before long he can write and organize material of his own, all because of his fundamental ability to sense relative values among the elements that come within the range of his attention.

A person who has learned to organize his own thought has gone a long way in the art of thinking. Having appropriated and understood the thought of what he reads, he has a foundation upon which to build the structure of his own thinking. To achieve such creative power as this is one of the greatest values that education can ever have. Correct thinking becomes possible only when the thinker is in command of all the relevant facts and principles. The first step in education is to master the fundamental facts and principles that are basic in such thinking. This fact is recognized everywhere. That is why there is so much insistence that the moron¹ memorize facts and principles. If this can be achieved, most teachers will expect genuine and correct thinking to be the result. The layman has a similar faith in facts. He judges people by what they know, assuming that those who have knowledge will think and act correctly as a matter of course. As a result, we have courses of study and textbooks sorely overloaded with factual content.

But the art of teaching pupils to think is a difficult one. Many of the pupils are sure to fail and that is embarrassing to all concerned. It is much more comfortable to fall in with the current notion that thinking is spontaneous and inescapable when the facts are well in hand. From this point of view, it is better carefully to exclude thinking from the school and spend all the time mastering facts.

In spite of all this, capable pupils insist on doing their own thinking and refuse to wait until school is done in order to

It should go without saying that the word *moron* is used here and hereafter in its scientific sense and has no criminal implications.

begin. They soon perceive more or less clearly that many of the facts that they are compelled to learn are useless and irrelevant so far as useful thinking is concerned. They are well aware of the situation when their teacher compels them to drill on material that they already understand. With a universe of attractive things to explore, problems to solve, books to read, stories and poems to write, music to compose, and pictures to paint, they must still sit idly by while the treadmill grinds.

Up to this point we have been discussing the attention span as it exists in the present only. But that is not the whole story. The attention can penetrate the past and project itself into the future. The past and the future have little meaning for the dullard. He can memorize what happened yesterday and what his teacher and textbook tell him to-day. He can also memorize what others have thought out about the future, but he cannot grasp what is now occurring in relation to what has happened in the past or with what is likely to take place in the future. Being without the power to perceive differences he cannot compare the present with the past or future. He has no power to reflect or forecast.

The capable child is strong in both reflection and foresight. He perceives the elements that are common between the past and the present. He is aware also of the changes that are taking place. Equipped with correct notions of the past and accurate estimates of trends, the capable person is ready to adopt the rôle of the forecaster. The ability to foresee correctly is far too precious to be left to development by mere chance. One important function of the education of the capable is to develop the power to estimate the future by every means possible. We shall indicate on pages 222 and following how practice was provided in the art of foreseeing.

The ability to see likenesses and differences has an inter-

esting relation to the realm of morals. Manifestly all of morality rests upon knowledge of the difference between right and wrong. We can drill the very young in correct habits by rule of thumb. That is usually a very proper thing to do. But no informed person will claim that a child is a master of morals after being trained ever so thoroughly in right action. True morality exists only when individuals, free to choose and act, are able to discern the right clearly and follow it tenaciously.

This fact serves to separate all wrongdoers into two classes — those who do wrong deliberately and those who err through inability to discern right from wrong. There is a vast difference between a malefactor who is so stupid that he cannot distinguish right from wrong and one who, having distinguished clearly, deliberately chooses the wrong. The first is the case of an ignorant wanderer gone astray without ideals to guide him. The second is an illustration of a bright person who has been badly miseducated.

The power of strong ideals in determining conduct is well understood and needs no discussion here. But it is worth while to point out the fact that thoroughly stupid people do not have ideals. Being without the ability to see differences, they cannot distinguish ideals from anything else. The points in experience to which vivid and intense human interests attach themselves are not discernible to them. This probably explains the fact that stupid people are nearly always inert and passive. They never feel the glorious urge of a clear but unrealized ideal.

The capable person easily perceives ideals. For him they shine like beacons in the darkness. It is easy, therefore, for him to persevere, to exercise what the common man calls will power, to choose a course, and to stick to it in spite of all apparent obstacles and discomforts. Furthermore, all

obstacles and discomforts are trivial to the person who is struggling on with his eyes fixed upon a clear ideal. This is why the correct education of the capable is of supreme importance. A capable person can revolutionize the world under the inspiration of an ideal that a stupid person cannot even perceive.

The second essential factor in the differences between the capable and the dull is the fact that capable persons have stronger tendencies to general activity. The reality of this characteristic as an independent factor in capability is questionable, but there are certain facts in the case that are worth noting. Intelligent children, even when very young, are notoriously disposed to general body activity. Among adults, too, there are two types of people that need to be explained. One is the person who is known to see deeply into things and to have ample power to discern the existence of likenesses and differences but who nevertheless never really does anything. On the other hand, we have many zealous people who have an irresistible urge to be up and doing but who do not know what to do. Each of these conditions emphasizes the importance of physical activity as a fundamental characteristic of brightness. This does not mean that all children who squirm and kick to a marked degree are necessarily capable, but the kicking and squirming point clearly to a liberal supply of energy to sustain the individual in later life in his struggle for what to him is ideal.

Possibly the passive dreamer and the overly active zealot are both just halfway into the capable class. The first has the ability to discern between likenesses and differences but has not energy enough to react to the situation, while the other has worlds of energy but is never able to discern a path into which he can direct his enthusiasm. For these reasons it seems better, for the present, to include strong tendencies

toward physical activity as one of the fundamental facts of capability.

We are often told that capable people excel in general intelligence. Consequently, there are those who would depend upon the so-called intelligence tests as a sole and sufficient means of discovering capable pupils. Let us examine these ideas in some detail and see how they conform with the two fundamental characteristics of capable people as we have assumed them.

At the very beginning, however, we are beset with the difficulty of defining our terms. There are three fairly well defined types of general intelligence. One is the intellectual sort, which delights in mathematics, philosophy, logic, and the arts. Another is the industrial type, which delights in the intricacies of mechanical contrivances. The third is the social type, which prefers to study human beings at first hand.

Of these three, the intellectual or abstract type has been most carefully studied. A large number of standardized tests has been constructed and put on the market to measure abstract intelligence. Each of these tests is a collection or battery of subsidiary tests. Each subsidiary test is composed of samplings of material that exemplify abilities which meet these three specifications: First of all, the samplings consist of material which is closely correlated with abstract intelligence. That is, in general, people who are known to be highly intelligent in the abstract sense can make high scores on the material in the subsidiary tests, and those who are known to be of low abstract intelligence ordinarily make low scores on the subsidiary tests. The second specification is that the scores made by large numbers of people on each subsidiary test must fall into what is called the normal distribution. That is, half of the scores are close to the average of all of them, but about one-fourth of them are markedly higher than the average and

one-fourth of them are markedly lower. According to the third specification the abilities covered by each subsidiary test must be independent of each other as far as possible. The subsidiary tests, when put together, constitute a test of abstract intelligence.

In order to see the relation of our two fundamental factors to abstract intelligence, it will be necessary to consider some of these subsidiary tests in some detail. The type of subsidiary test that correlates most highly with abstract intelligence is the one relating to giving the opposites of a given list of words. Obviously the ability to see differences plays a major part here.

A second subsidiary test usually relates to general information. It includes elements such as, "Apples grow on vines, shrubs, trees, bushes," in which the subject is required to draw a line under the correct answer. People who do not have a large fund of general information are able to mark correctly only a few of the elements in the test. The theory is that more intelligent people have more general information than do those who are less intelligent. This is easily explained in terms of seeing likenesses and differences. To those who are lacking in this all-important quality the world is something of a blur. Nothing stands out distinctly from anything else. These people may look but they do not see. They may travel all over the world and remember nothing. They may read volumes and retain nothing, because to them each sentence is a mere group of words which, if they are remembered at all, must be memorized just as the intelligent person memorizes a section of nonsense material. People who cannot see likenesses and differences often fail to remember what they have seen and read, simply because they never really see and read. To them a beautiful passage in literature is just another bunch of words, the "Mona Lisa" is just one more picture, and Beethoven's symphonies just a queer collection of sounds or

noises. The dull person can do wonders with rote memorizing but the sheer mass of the details soon overwhelms him. Dull people never have large stocks of information.

Another subsidiary test that is in general use is one in which certain mutilated pictures are presented. The subject is required to tell what is missing. It is obviously hopeless to expect people who cannot respond to differences to detect what is missing. A missing nose, eye, ear, or hand is simply beyond them. They are not curious when shadows point toward the sun or when the trees are bending toward the wind, because they do not see these anomalies at all.

Another subsidiary test is concerned with the requirement that the subject draw geometrical figures from a given model or from memory. Those who lack intelligence fail to make an accurate drawing. The minor elements of the picture escape them. Again, they have "eyes that see not." Their perceptions are faulty and therefore their imagery is scrappy and inaccurate.

Some of the intelligence tests contain parts which test the subject's power to see analogies. A situation such as, "A glove is to the hand as a shoe is to what?" is presented. Here the likenesses are more complex. The subject must see similarities of *relation*. *Similarities* in number relations are also used in some tests, as when the subject must write in the missing numbers in the series 1, 3, 5, 7, 9, —, —.

Other subsidiary tests are still more difficult. They require the subject to point out a relation which is similar to one that is supposed to be known. One type of these is the interpretation of a picture. For example, in one case a picture is included showing a woman in a kitchen. Her environment is clearly set forth. There is a table and a stove with a boiling teakettle. The woman is answering a call on a telephone and as she talks she is spilling the contents of a saucepan on the

floor. The requirement is, "Tell what you see in this picture," and the subject is scored upon his ability to see the elements and relations that are similar to those with which he is familiar. The very dull subject, being able to see only the most obvious elements, responds, "I see a table, a stove, a teakettle, a woman, a telephone," etc.

Subjects with higher levels of intelligence, having noted in their own experience similar elements that are less evident, respond, "I see a table by the window, a teakettle on a stove, a woman talking over a telephone and spilling something from a pan which she holds in her hand."

The bright pupil is the one who has been able to perceive relations that are still more subtle. When he looks at the picture he recognizes similar subtle relations in it. He notices at once the outstanding element — the saucepan with the soup spilling on the floor. It often occurs to him that this is funny and he laughs. He remarks that the woman has been getting dinner. Just then the telephone rang. She answers it and a voice tells her that her husband, son, or daughter has been killed or painfully injured in an automobile accident. The bad news overwhelms her and makes her forget all about the dinner and the contents of the saucepan. Subjects who respond in such a manner have clearly experienced the same situation either actually or vicariously. They simply identify the elements in the picture that are similar to those which they have experienced and understood.

Sometimes subsidiary tests require generalization. An example of this is the proverb test. The subject is asked to read this sentence, "Paddle your own canoe." Then he is asked, "What does the sentence mean?" The dull person responds, "It means to take a boat ride." The bright subject says, "It means, 'Run your own business.'" Each pupil has done the best that he can. Both have responded in terms

of their own past experience that is consciously recognized as most similar to paddling one's own canoe. The bright child responds with a generalization because he has recognized the similarities and differences upon which generalizations are always based. The dull child, having seen few similarities or differences, is to that extent unable to generalize at all.

From the foregoing discussion it will be evident that the ability to see likenesses and differences plays a fundamental part in the attainment of success in a general intelligence test. The part played by general tendencies to physical activity is rather vague. Doubtless there are a few pupils who, having spent a decade at "twirling their thumbs" in school, are either too lazy or too lethargic to finish the test. But these cases are very rare.

Mechanical intelligence has not been investigated so thoroughly. There are few tests of this kind, but they show clearly the importance of the ability to see likenesses and differences in the field of mechanics. The mechanical tests consist for the most part in the requirement to assemble mechanical contrivances when their parts are all given or to locate from a series of pictures the parts that belong with total mechanical contrivances shown in another series of pictures. The people who succeed in the test are those who recognize in it certain similarities to elements and situations that have been a part of their own past experience. Those who score low are subjects who either have had no experience with mechanical objects or those who, having had such experience, are still unable to identify essential likenesses and differences.

Social intelligence has scarcely been investigated at all. Concerning it we can only theorize. But there are no signs that the hypothesis of likenesses and differences will fail us even here. It is entirely possible that what we know as social intelligence is largely, or even entirely, the ability to detect

slight changes in the behavior of other people, to react to faint signs of fatigue, boredom, interest, and the like in the people we meet. The real bore annoys us terribly and never knows it. Another pestiferous fellow to have around is the one who "hasn't sense enough to take a hint." The reason for the bore's unattractiveness is largely beyond his control. It is something that he cannot sense. The distinctions involved are too fine for him. He is just not born right in that particular. He is feeble-minded and moronic so far as social intelligence is concerned. None of us cares for him particularly as a friend or companion.

On the other hand, we are glad to have the friendship of the socially intelligent. Such people can anticipate our moods and they have social intelligence sufficient to make them aware of what we want to hear and what we do not want to hear. They know when to talk to us, what to say, how much to say, and when to keep silent. If our nose is too long or crooked, they have the intuition to comprehend the difference between our attitude toward our deformed nose and our attitude toward our hair or eyes, which we know to be attractive. Thus they mercifully say nothing about our nose and artfully keep us thinking about our hair and eyes. The bore talks about them all indiscriminately or else ignores them all. Surely the ability to perceive likenesses and differences is fundamental in all friendship.

The preceding paragraph brings us to another characteristic that capable pupils often possess. This is the thing that we call leadership. Leadership is largely explainable in terms of the ability to see likenesses and differences. Its major prerequisites are friendship (popularity), justice, quickness and correctness in decision, and certainty that the decision is right. Friendship in the sense of popularity has already been discussed, and its relation to the ability to see likenesses and

differences has been pointed out. Justice is obviously a matter of weighing and comparing. A person who is ignorant of relative values cannot render justice. Quickness, correctness, and certainty in decision are conditioned upon a person's ability to see and distinguish clearly his goal or ideal. No person with an attention span of the moron type can ever be a leader. The attention span of the leader of men contains a summit, goal, or ideal of which the leader is keenly conscious and to which his feelings are securely tied. For him no time of deliberation is needed. His decisions were made long beforehand and recorded in his very neurones. He is therefore decisive in his reactions and sure of himself after his decisions are made. Such are the elements of leadership.

The capable person, as has been said previously, has an attention span that includes not only the elements of a situation but also the similarities and differences that exist between them. Each of these comparisons is a hook upon which it is possible for him to organize his experience. The universe thus tends to resolve itself into order and relation instead of being a Sorbonian bog of chaos and confusion. The whole realm of intellect and life is thus brought to his hand in a usable form. Being keenly alive to subtle and fundamental likenesses and differences, he has infinite possibilities of choice. In ordinary language, he is adaptable and resourceful.

There is another type of intelligence that has not as yet been named as such, so far as the authors are aware. This type is usually spoken of as talent and is related for the most part to the fine arts. For our purpose it is convenient to include it here under the name *artistic talent*. We have all met persons of this sort and have perhaps wondered at the secret of their power. For example, how is it that so few of us write sonatas and poems or paint and carve masterpieces? Once more our hypothesis will help us. The great musician

is the person who perceives hidden but beautiful likenesses and differences in harmony, tempo, and volume. In a recent experiment¹ it was proved that all the warmth, feeling, nuance, and the like that master pianists put into their renditions of the same composition can be accounted for in terms of differences in tempo and volume. The master performer in music must first of all be able to perceive these differences. Without such perception the technique of his playing may be involved, but it is always mechanical. In like manner the appreciation of pictures, sculpture, dramatization, and indeed all art depends upon one's ability to perceive and enjoy fundamental likenesses and differences.

The discussion thus far has been based upon the assumption that capable children are capable in all respects. Some of them are; others are not. Indeed there are all gradations, from those extremely fortunate persons who can become pre-eminent in almost anything down to those who are highly gifted in some narrow field and practically feeble-minded in everything else. The number of those who are highly but narrowly talented is not great, but unfortunately they attract a great deal of attention. Here, for example, is a person who is highly talented in music, art, dramatics, or what not but who has no moral inhibitions. Again, here is a person exceedingly brilliant in research who has no sense of social propriety. Here is a man who can get up on a box on a street corner, attract a crowd, entertain them by making a short talk upon any historical character that anyone in the crowd may name, and then make the crowd pay for the entertainment in cold hard cash — an eminent man in this one respect but eminent in nothing else. Here also is the person of high social intelligence who makes his living by swindling his fellow men out of

¹ Whipple, G. M.: "A New Method of Analyzing Musical Style by Means of the Reproducing Piano," *Journal of Applied Psychology*, Vol. XII, pp. 200-213.

their hard-earned savings; and here is the man of high mechanical intelligence who makes his living by cracking other people's safes.

All these are types of high and narrow talent. Not all of them by any means are bad or immoral, but they are all good subjects for a newspaper story. This advertising has gone on to such an extent that many of our people believe that evidences of capability are things to be inhibited and hidden, on the ground that there must be some corresponding hidden weakness somewhere. The truth is far to the contrary. Most capable children are of the all-around type, and the great majority of those who are narrowly talented live useful lives.

In this connection it is appropriate to mention again the physical characteristics of bright pupils. Such pupils always show pronounced activity in one way or another. They are never inert or sluggish. Usually they are healthy. Some unhealthy people are brilliant but their brilliance exists in spite of their ill health and not because of it. The tendency to marked activity is the second fundamental trait in genius. Given strong tendencies to act and the ability to perceive likenesses and differences, we have the two essentials of future greatness. If the child who possesses these traits fails to make good, the failure is due to his education, not to any inherent weakness.

The greatest characteristic of capability is the ability to create. This is the highest activity of man. Creativeness manifests itself in a multitude of forms, but it is much the same wherever it is found. It is always conditioned upon insight and impulse. The very word *insight* carries with it the notion of seeing into things — of perceiving likenesses, differences, and relations that are not apparent to the ordinary observer. Perception which is rich in detail and sense of

relation leads naturally to what we call creative imagination. Persons who have creative imagination can in a true sense imagine things they have never seen, heard, or experienced. But this is true only in a sense. Mental images of the creative type are not entirely new. They are made up of old elements that are related as no one has ever thought of relating them before. Furthermore, the relations are not new. They have been perceived previously and now are applied in a setting in which they have never been applied before. Creative ability is nothing more than the combining of old elements in a new way. But the *particular* old elements have never been combined in that *particular* way before.

To make this clear, consider the keyboard of a piano. It ordinarily has eighty-eight keys, each of which produces its own peculiar tone. These eighty-eight tones are quite old. They are familiar to all. They may be combined in thousands of ways. The ordinary person can make some of these combinations by idly running his fingers over the keys. But the ordinary person cannot tell just what tones to combine or in what order, or at what rate, or with what intensity the combination should be made in order to create a sonata or grand opera score. The ordinary person is also blind to the relation which exists between tone combinations and mood. But the person who can create music has this power, and therein lies the secret of his genius. He, too, has run his fingers idly over the keyboard, but as he did so he perceived the likeness that certain combinations have which others do not have. He knows the type of combination that can stir the soul to anger, that can soothe the bereaved, and that can turn cowards into heroes. He perceives and comprehends the subtle differences which unite to produce harmony and beauty. In this sense he can create music that no ear has ever heard before.

With painting the situation is much the same. Someone

has facetiously remarked: "Anyone can be a great painter. All that you have to know is how to arrange the paints on the canvas." The statement is true but it is utterly impossible for most of us to produce a good picture.

The person with creative ability is one who perceives and imagines hidden relations and has the impulse to incorporate them in material form so that others may perceive them also. Such people can and do frame in their constructive imagination poems, paintings, sonatas, and symphonies that have never before been perceived. It is they who can see "angels in a block of marble," "sermons in stones," and "theories in deep sea ooze." This fine quality is the great heritage of the capable pupil and the chief reason why we can ill afford to neglect him.

CHAPTER IV

GUIDING PRINCIPLES IN CURRICULUM CONSTRUCTION

THE curriculum problem is one that is never permanently solved. Each generation must face it. The scope of this chapter, therefore, will be limited to the discussion of those elements of the curriculum which are valid in the present generation living under the conditions in which we find ourselves during this, the first half, of the twentieth century.

The content of the curriculum changes with the passing of time, but there are a few laws and principles which are applicable in all times and places. Some of these principles are applicable to the education of all children, while some apply to the education of the capable only. The principles which relate to the education of all children will be reviewed briefly, and those which relate to the education of the capable will be discussed in more detail.

There are two requirements which a genuine education must meet under all conditions and in all ages. The survival and progress of society must be insured and the welfare and progress of the individual must be provided for. These requirements have been met with more or less success by the use of several guiding principles of curriculum construction. The first principle may be stated thus:

Every society or nation must see to it that certain highly important and relevant facts, skills, and attitudes be fostered in its children. The past has some elements of social heritage that are so important that it would be dangerous if they were

forgotten. Perhaps the most important of these is the use and preservation of a common language that all can speak and understand. Within the last century we have come to believe that all children should also be taught to read and write this language. Then there are certain traditions of religious, moral, and patriotic types that must not be allowed to perish. There are certain hymns, songs, paintings, and sacred writs that must be preserved. To fail to preserve these elements would be disastrous because they are aids to social solidarity.

In our own nation there is a well founded belief that all the people should have even more than this. It is very desirable that our nation should prosper, that its citizenship should be educated in freedom, and that our scientific information should be preserved. This requires that all pupils should have a chance to learn certain fundamentals of arithmetic, geography, hygiene, and civics.

A second principle of guidance in curriculum construction may be stated in these words :

The curriculum must grow out of the needs and interests of individuals who are to be educated. "Needs" and "interests" are not always synonymous. This is particularly true with future needs. Children are almost never interested in the things that they will need most sorely when they grow up.

Other principles which must guide the curriculum maker are these :

The curriculum must be graded according to the understanding of the child.

Every effort must be made to make pupils learn what they need to learn.

Teach first and last that which is most likely to be needed.

All of these principles apply to the education of every child. There are a few other principles that apply only to

the education of the capable. These will be stated in direct form and discussed one by one.

The curriculum for the capable child should be rich and varied.

The ability to see likenesses and differences is the key to quick and sure learning. The dull child whose attention span is of the plain type has no magic power in learning. What he gets must be learned by rote memory. Each element must be learned separately. There are few associations between elements and no sense of subordinate relations. The labor of learning is dull and exceedingly tiresome. In spite of all this, many a slow pupil has developed his rote memory to a marvelous extent. He is letter perfect in what he does know and easily becomes a joy to a meticulous and finicky teacher. He is successful, too, with almost every teacher because, being laborious, patient, and schooled in hard work, he usually knows what the book says and can give an exact reproduction of it. He soon learns the trick of looking interested and holding his hand up at every opportunity. Indeed, he has succeeded so well at fooling his teacher that Terman says: "If you want to know who the bright child is in the average schoolroom, do not ask the teacher. Look in the register and find which child is the youngest." The youngest child is usually the brightest one.

The situation described in the preceding paragraph is entirely artificial and entirely bad. If our intelligence tests had done nothing more than to show this situation up, they would have been worth many times their cost. Capable children do not care to spend their time waving their hands in the air and telling a teacher and a class something that everybody knows. They have many things to tell that the teacher and the rest of the pupils do not know. Furthermore, the world is full of interesting things to think about. The

capable child has a rich imagination. With it he can go to the ends of the universe and summon countless elements and ideas to appear before him as he sits in his class. While this is going on the teacher may notice that he is not paying attention and may interrupt him with some twaddle such as, "Who was George Washington?" or, "Who said, 'Give me liberty or give me death'?"

One of the authors saw an excellent example a while ago of the sort of thing just described. A survey was being made in one of the counties of Wisconsin to discover the mentality of the pupils who were retarded in their studies. In one school the teacher asked to have a certain pupil tested. He was not retarded but he was "so listless." She could not hold his attention. He seemed to spend all his spare time in daydreaming. The pupil was tested and his intelligence quotient proved to be in the neighborhood of 140. Additional questions proved that he had an astonishing amount of general information. He came from a home which had no library and his opportunities to travel had been practically nil. The examiner was very curious to know where he got his information. When he was questioned it turned out that he had got hold of an encyclopedia somewhere. The encyclopedia was a one-volume affair and much out of date, but it was furnishing dream stuff to that boy — and his teacher was in doubt about promoting him at the end of the year!

Just here it seems proper to turn aside for a moment to examine this thing that we call daydreaming or mind wandering. Popularly, daydreaming is often looked upon as a useless waste of time. Nothing could be farther from the truth. Daydreaming has been the source of all the progress that the world has ever known. James Watt noticed a very ordinary and commonplace teakettle one day. The water in the

kettle was boiling and the steam was raising the lid. Watt saw this happen and had a daydream about it. As a result of that dream giant steam locomotives are pulling our trains and running our industries.

A flying bird was the occasion of daydreams on the part of Darius Green and many others. At last the Wright brothers not only dreamed the dream but made it come true. Someone had a daydream about a magnet, and the mariner's compass was the result. Columbus dreamed about a new route to India and discovered a new world. This would be a hopeless world indeed if all of its dreamers were taken out of it.

Why, then, do we have this unfortunate idea that daydreams are useless? The answer is not hard to find. Most of our daydreamers have been exceedingly poor in dream stuff. Our educational system has made them so. Daydreaming is prominent during the period of adolescence. The young dreamers have not had much actual experience and our textbooks, until quite recently, have made no effort to provide them with vicarious experience. Without experience dreams are vague and meaningless. They cannot arise out of thin air. But dreamers will dream; and if their experience has been meager, their dreams may be fantastic and absurd. Detecting signs of fantasy and absurdity, uncritical observers are likely to decry daydreaming when the real trouble is the lack of a rich experience which the dreamer has had, often through the fault of the very ones who criticize his daydreaming. We need more daydreaming and better daydreaming. In order to get it, we must be careful to provide an enriched vicarious experience for those who are potential dreamers. In doing this we shall be doing an excellent thing in furthering creative activity in the world.

A second principle in the education of bright pupils grows out of the preceding discussion as a corollary. *The capable*

pupil must be relieved from monotony as much as possible. Capable pupils are not particularly equipped to do drudgery. The drudgery of the world must be done, and there are enough people who can do it well and who are happy in it. Dull pupils usually enjoy doing what they can do, but they are not happy when they are forced to attempt that which is and ever shall be beyond them. On the other hand, it is irksome and demoralizing to be compelled to do work that is beneath one's ability, and continuous drill upon the minutiae and tools of learning are beneath the ability of the capable child. Hence one of the troublesome problems in the education of capable children is to get them to acquire a mastery of the tools of knowledge. They are often greatly bored with spelling and the fundamentals of arithmetic. But spelling and arithmetic have both won a place among the minimum essentials of the education of this generation, and bright pupils must master them regardless of boredom.

To alleviate the boredom as much as possible, it is well to get these fundamentals mastered quickly. It is not the subject matter itself but dawdling over it that irks the capable child. In the experiment which is to be described later in this book the authors found that the whole problem of the mastery of the tools of knowledge by capable pupils can be solved in a very simple manner. The main thing to do is to provide conditions such that the capable pupil can get the uninteresting but necessary thing over with quickly. To make the learning of the fundamentals a long drawn-out process for capable children is like taking a dose of disagreeable medicine drop by drop or like spending an hour at pulling a tooth. This question will be discussed more fully in the chapter on method. All that is necessary here is to emphasize the point that the minutiae of education for the capable pupil should be completed as quickly as possible.

Another principle which has an important bearing upon the education of the capable pupil is that of exploration. The curriculum in the upper grades of the elementary school and to a large extent throughout the high school should be frankly and deliberately superficial. This is one of the most difficult things really to bring to pass. The fault lies in the training of our teachers. It is natural and right that the university and college professors should teach their subjects in a thorough and fundamental manner. It is also natural for teachers to imitate the methods and procedures by which they themselves have been taught. The result is a group of teachers in our junior and senior high schools who are trying to teach immature pupils by university methods.

This problem is as yet unsolved. The authors do not pretend to know what the solution will be, but they know that some solution can and will be discovered. They believe whole-heartedly in the requirement that education and instruction must be suited to the needs of the pupil as far as possible. The curriculum question will not be completely answered until we can offer genuine exploratory courses to capable pupils. This is true because exploratory courses fit the needs of these pupils.

It has been pointed out frequently heretofore that capable pupils possess (1) ability to see likenesses and differences, (2) a large amount of physical activity, and (3) a strong emotional urge. They readily acquire wide experience in one way or another. In a very real sense the world is at their feet. They have an ability that may be applied in almost any direction but not in every direction or even in two directions. The momentous question is: Which direction shall they take — in what calling or profession shall they spend their lives? The importance of this problem is widely recognized, but the teacher on the job often forgets all about it.

It is quite obvious that a young person cannot decide intelligently upon what he wishes to do without some acquaintance with the total field. A boy who has in him the making of a great chemist cannot decide upon chemistry as a field of specialization unless he comes in contact in some way or other with chemistry. A girl who has possibilities as a leader in domestic science cannot become a leader in domestic science if she never has an opportunity to become acquainted with that subject.

The result of such restrictions leads to the most colossal and stupendous waste of invaluable talent that one can imagine. Here is a man laboring in the street who should have been an astronomer. Here is a girl working as a stenographer who should have been an artist. Here is a person who never has found his proper line of work and who spends his time aimlessly flitting from one thing to another.

The cause of this futile waste lies partly in a prevalent misconception of psychology. The idea is abroad that superficial instruction is wrong or unworthy and that dabbling is always a sin. This notion is wrong. Life is full of situations in which we must make a decision after a more or less superficial survey. A woman buying a coat usually does not spend all her time examining one garment. A person looking for a helper does not usually employ the first applicant that comes along. In the ordinary situation a superficial survey is made of as large a field as possible before a decision is made. The intelligent woman will keep looking until she is satisfied that she has found the best coat that anyone has to offer. The wise employer looks over all his applicants before he decides which one to take. Now this question of deciding upon one's field of specialization or upon one's life work is exceedingly more important than that of buying a coat or employing a helper. It is all the more important, therefore, that at least

a superficial survey of the possibilities be made before a decision is reached.

Exploratory courses are justifiable also from another point of view. It is a good policy to play at a thing awhile before one decides to work at it. The educative value of play is at last beginning to receive the recognition that it deserves. But not even yet do we recognize the usefulness of play in helping us to select our chosen work. It is really quite safe to assume that no one should ever adopt as a life work an activity at which he would not gladly play. Now play has a pronounced element of dabbling in it. A child on a new playground seldom spends all his time with one toy. He tries them all out and then decides upon the one that he likes best.

The adolescent period is still a play time. Apparently the main purpose of existence at that age is to play at least for a time with every sort of worth-while activity. When that has been done the child knows what he wants to do. Dabbling as a form of play is very much in order. The function of the teacher of exploratory courses is to help the child to play at as many lines of activity and knowledge as possible. Furthermore, each field of knowledge should be made to appear at its best. The aim is not to learn the field but to see if one likes it. The main point is to present a preliminary overview, not to learn each subject in a fundamental manner.

In visiting classes of adolescents one cannot escape the impression that the courses are anything but superficial. Here, for example, is a teacher who is well versed in physics and who is called upon to teach general science. Such a teacher usually contrives to get his class to the part of the general science text that relates to physics. After thus arriving in territory that is familiar and interesting to the teacher, the class somehow gets stranded. The teacher leads them into all the details of the subject. He enlarges upon each ele-

ment and supplements the course with lectures from his own notebook, which he has usually saved from the time when he studied physics in college. After a while the end of the year approaches, and a large part of the general science text, relating to biology and astronomy perhaps, must be omitted. When the last bell has rung on the closing day of the session the class heaves a great sigh of relief and goes on its vacation fully assured that at least one thing is settled — they don't want anything further to do with general science or physics.

Such exploratory work is, of course, nothing more or less than a hoax. It has no justification and no right to exist. On the other hand, genuine exploratory courses are a necessity if capable pupils are to receive any special attention. These courses must be carefully made out. The text material must not be abstruse or wordy. The teacher is not the only one who errs in trying to be too fundamental. Some of the authors of our junior high school textbooks fall into the same error in their efforts to provide material that is exploratory in character. They, too, are inclined toward profundity at times. Both teachers and authors will do a better job when the exploratory principle is clearly recognized as a guide in curriculum construction for bright pupils.

Two more principles relating to the curriculum for bright pupils remain to be considered. In the first place, there must be special provisions for activity. One of the two fundamentals of capability is a strong urge and plenty of physical activity. It is interesting to note how the present curriculum has failed to consider both of these characteristics. Few people have ever thought of trying to teach a child to see likenesses and differences, and no one has ever tried to develop a technique for such a thing. Furthermore, the whole tendency of the school is toward the suppression of

emotional urge and physical activity. A schoolroom must be quiet. No one should ever get excited or angry in a schoolroom. It is also quite improper to rejoice or mourn in one's class. The sole object in our school procedure seems to be to include a sort of hypnotic state whose chief elements are emotional passivity and physical quietness. Indeed, intellectual activity other than intense memorization is rather taboo. Nobody is supposed to ask or even to think of a question that is not answered in the textbook. All debatable or moot questions are carefully excluded. Our whole educational practice is summed up to a large extent in: "Get quiet, keep quiet, make yourself as comfortable as possible, and soak up everything that the teacher and the textbook say. When you have done this you will get a good grade. When you have received a sufficient number of good grades you will receive a diploma and your education will be complete." Such a procedure is a travesty for any pupil. For a capable pupil it is disastrous. Nothing could be more poorly adapted to the needs of the individual. Here is a child who is dreaming dreams and who has a strong tendency to carry his dreams into action. Some of the dreams, of course, are not particularly desirable. A bright boy who has been starved intellectually may dream of how the teacher would act if she should discover a mouse in her desk or how some unpopular pupil would react if he should sit down on a pin. To fortify the school against such evil dreamers as these, we have slowly developed both in the home and in the school a code of politeness which restrains such wicked pupils from carrying out their troublesome dreams. There was a time, of course — before this politeness idea had done its work — when bright pupils did carry their undesirable dreams into execution, but that day is past for the most part.

Another plan has also been devised to take care of the trouble-

some tendency of bright pupils to be alive. According to this plan, good activities are to be substituted for bad ones. Accordingly, bright children are taken to the playground or gymnasium and worked so hard that all tendencies to undue activity are taken out of them. Then they are in the proper condition to sit still, rest, and absorb.

All of this is radically wrong. The pupil's tendency to activity is fundamental. It should be encouraged rather than suppressed. It should be guided, not extirpated. But that is not in accord with the established order. According to it, capable pupils are to be suppressed. Plausible sounding pretexts are advanced to keep them from doing what they can and should do. We are told that capable pupils become conceited if they are not held down. No one has a right to accomplish more than another anyhow. Hold the bright fellows down. Discourage and suppress them as much as possible. If they are really capable, they will survive and make good in spite of the school.

Perhaps some of them do. It takes a lot to kill some people. But nobody knows how many of our most promising pupils are thus turned into permanent laggards or how many are brought to hate what they ought to enjoy. On the other hand, adaptability to changing situations, resourcefulness, initiative, and leadership are mighty factors in society. There is no evidence that the market is overstocked in these qualities. There is reason to believe that all of them are improvable with practice. Then, in the name of all that is desirable in education, why not encourage them? They must be encouraged if our nation is to do its part in the work of the world. Curriculum material must be provided and administered in such a manner as to discover, foster, guide, and inspire all the urge that exists in our best pupils. The period of compulsion and indoctrination must be reduced to the

minimum. The world has plenty of problems and needs that demand activity of the creative sort. Our capable pupils have in them the making of creators. But creating requires action and drive. We must quit this foolish policy of repression.

The final principle in the education of capable pupils has already been hinted at. These pupils, more than all others, need a stimulating environment. It is quite possible for flowers to "blush unseen and waste their sweetness on the desert air." It is quite possible for a person to possess the two fundamental characteristics of genius and never know it. Tendencies to achieve and to create thrive with the proper practice. Without such practice they shrivel and die.

The intelligence tests and tests of aptitudes show that the talent of the world is quite well distributed. Children in the Middle West, for example, make scores just as high as do those in New England or Europe. This being true, how does it happen that so few of the people of the United States achieve greatness? We have had no Shakespeares, no Rembrandts, no Michelangelos, and no Beethovens. We have had one Edison, one Ford, one Rockefeller. But none of these can be pointed to with pride as a product of our educational system. We have a volume entitled *Who's Who in America*, which is filled to a large measure with people born on the Atlantic seaboard.

How does all of this come about? Does the Atlantic seaboard have a "corner" on intelligence? The intelligence tests give no such indication. Have the schools there been better than they were elsewhere? They undoubtedly were somewhat better when the people whose names are in *Who's Who in America* attended them, but the main reason lies in differences of environment. The East has had more and

better libraries, art galleries, concerts, orchestras, and operas. The general level of culture has been higher.

In Europe a deliberate attempt has been made to educate the gifted and leave the dull in ignorance. That attempt was a failure, to a large extent, because the scheme was based on the false assumption that all of the nobility were gifted and all the peasants dull. But the scheme was not entirely bad by any means. The effort to close the door of opportunity on the peasant class was one of the mainsprings in the rise of democracy. The repression that resulted from this loss of opportunity was one of the chief urges that sent our forefathers to the new world. Having arrived here, they were careful, first of all, to build an educational organization that would forever hold the road to progress open to the peasant class.

Unfortunately, however, the good points of the European scheme were largely forgotten. That scheme did furnish an excellent education to large numbers of capable pupils. It produced a high level of culture, one that was successful in stimulating the fundamental qualities of greatness in Milton, Newton, Descartes, Goethe, Kant, and all of that illustrious past.

Now our problem is somehow or other to make up for our past oversight. We need a richer and more widely diffused cultural environment. Such an environment is the soil in which genius thrives. Without it genius withers and dies. Hence the necessity for providing the best possible social and cultural environment for capable pupils.

In closing this chapter it will be necessary to answer some questions that have doubtless arisen in the mind of the reader. Someone is sure to ask why it is necessary to differentiate between the principles of curriculum construction that apply in the education of all children and those that

apply to the education of capable children. Will not whatever is good for the capable child be good also for the dull child? The answer is clearly *No*. A rich and varied curriculum is confusing and mystifying to a dull child. He simply cannot comprehend it. To him it is forever a closed door unless we can somehow or other inject into him each of the two fundamental characteristics of brightness that he does not possess. The dull child should not be deprived of his monotonous tasks. He loves them. They are his proper realm. To bother him with anything else leads to nothing but grief and feelings of inferiority. The dull child will not profit from exploratory courses. Why explore what one cannot understand? Likewise, dull pupils have little or no need of additional types of activity. The ordinary course of study has been built for the mediocre and the dull. It provides practice for all the activity and emotional urge that dull and mediocre pupils possess. A high level of culture is unsuited to the dull and the mediocre. They can neither understand nor appreciate it.

But to avoid a misunderstanding here, it is necessary to consider our definition of dull and mediocre pupils. Dullness and mediocrity as here used mean dullness and mediocrity in every respect. There are hosts of people who are dull and mediocre in some respects but not in others. These people are not included in our definitions of dullness and mediocrity. Whenever a person shows the ability to perceive hidden likenesses and differences *in any one thing*, the moment he exhibits an urge to excel in that thing, at that moment he becomes a member of the class that we have called narrowly but highly talented. As such he deserves all the attention and inspiration to which he is capable of responding. For this reason we must exercise great care in deciding who is dull and mediocre. There is many a boy who will never

really parse a sentence, prove an original exercise in geometry, or understand a figure of speech. But that boy may become a veritable godsend when our automobile fails to function as it should. There is also another class of pupils who are ever so dull in abstract affairs and in mechanical relations but who nevertheless can make friends and sell goods. Neither of these types is really dull or mediocre. They may be highly talented in their own fields.

In résumé this is the classification which is being used in this book :

1. Those who are dull or mediocre in every respect. Their number is comparatively small.
2. Those who are narrowly but highly talented. Their number is quite large.
3. Those who are capable in every respect. Their number is again small, but they are exceedingly important as a group.
4. Those who have one characteristic of capability but not the other. (See page 26.)

The last class deserves further attention. It includes those who can perceive likenesses and differences but who are lazy, who are lacking in emotional urge to make any use of their ability. This class also includes pupils who have industry and emotional urge but who have no ability to see likenesses and differences. We have no scientific studies at all relating to this class so far as the authors are aware. Ordinary observation, however, assures us that the class really exists. We do not know whether they were really born that way or whether they are the product of our stupid plan or lack of plan for educating bright pupils. Just now the latter explanation seems the more plausible. It is probable that a pupil's activity and urge may be entirely repressed by monotonous surroundings, while his ability to see likenesses and differ-

ences somehow survives. In some cases it may be impossible to repress the urge, while the ability to perceive likenesses and differences is being stifled. On the whole, it seems to be more plausible to account for the fourth class as casualties or derelicts left over from a wrongly conceived type of education.

One other question remains to be considered. May not dull and mediocre pupils gain profit from a stimulating cultural environment by being taught to appreciate it? The question is important because in all probability we shall always have many people who can appreciate fine things without ever having the opportunity to perform or create. The important thing to remember is the fact that these people are neither dull nor mediocre in any real sense. The ability to appreciate an art cannot exist with dullness in that art. For this reason a high cultural environment is valuable, not only for the future creators of culture but as an enrichment in the lives of those who can be taught to appreciate and enjoy that which is beautiful, true, and good.

SUMMARY

The purpose of this chapter has been to point out several principles which are fundamental in the construction of a curriculum for gifted pupils. Care has been exercised in formulating definitions of dullness and mediocrity, high but narrow talent, and true capability. The following principles were listed as applying to the education of gifted pupils:

1. The curriculum must contain the material that promotes social solidarity and continuity.
2. The curriculum must grow out of the needs and interests of those who are to be educated.
3. The curriculum must be rich and varied.

4. The curriculum must avoid monotony and drudgery as far as possible.

5. The curriculum must contain a large portion of exploratory material.

6. The curriculum must provide for activity and must stimulate emotional urge.

7. A stimulating and cultured environment must be provided for those who are capable, partly as an urge to those who should cultivate their talent to achieve and partly for those who have little talent for achievement themselves but who can learn to appreciate and enjoy the achievements of others.

CHAPTER V

PRINCIPLES OF METHOD

IN the preceding chapters attention has been called to the fundamental difference between the capable and the dull. Certain principles have been pointed out that are valuable as guides in determining what sort of content shall be provided for gifted pupils. It now remains for us to consider in a more detailed manner how the education of the gifted is to be brought about.

Before doing so, however, it is well to glance again at the present situation, which has grown out of the philosophy of the past. We have seen that two principles are dominant in our conception of democracy. Democracy means, first of all, equality of opportunity. Indefinite perfectibility is also a democratic ideal, but along with it there is always a certain mental reservation. When the idea of indefinite perfectibility has conflicted with the idea of equality the latter has always prevailed. Since all men are created equal all men have a right to grow to a prescribed level. Beyond that they have no right because, according to the prevailing view, there is no beyond; or, if there is, such territory is one into which a child enters illegally, like a burglar entering other people's houses. The result has been quite natural. The whole existence of the gifted pupil has been largely ignored. If there are such queer persons, the best thing to do is to let them alone, as one reacts to a strange animal in a menagerie. If, perchance, the strange animal should move about or

thoughtlessly get in the way, the thing to do is to put him back into his own place and keep him quiet. The general policy has been that of *laissez faire*. It is as if the teachers and educators should commune thus with themselves: "Here is a strange new creature. We do not understand it. It learns far too much and too quickly. It reacts in an extraordinary manner at times and might become dangerous. But as long as it lets us alone we shall let it alone." This *laissez faire* policy has been greatly strengthened by the notion that, if there is such an undemocratic creature as the capable child, it will know how to take care of itself because genius like truth cannot be forever cast down. One is in no sense capable unless one can succeed in spite of all obstacles.

This doctrine is quite effective because it is partly true. People of pronounced genius can succeed without school education and even in spite of it. But this is a very poor doctrine of conservation. One might as well employ a similar *laissez faire* policy with regard to all our wild animals and plants. Why pass a law to protect deer, for example, when there are a few deer that are lucky enough or intelligent enough to escape the hunter? Why pass a law to protect bittersweet? If bittersweet is as beautiful as it seems, some of it ought to have sense enough to grow where no marauder can find it.

Such reasoning is of course absurd. Its absurdity as applied to the capable pupil is amply proved. Our standard tests demonstrate that there are many pupils who have in them the makings of geniuses; yet geniuses are notoriously scarce. Psychology tells us that talent like all other human qualities flourishes with proper exercise and withers without such exercise. It is evident, therefore, that our present lack of method in taking care of capable pupils is anything but satisfactory. Something needs to be done.

The present situation of the capable pupil constitutes a real emergency. To make matters worse, neither our science nor our philosophy has as yet much to offer. The only thing that is possible at present is to look about us for something to use as a makeshift. There are five types of procedure that give promise of at least temporary value for the capable pupil.

The first of these is the rapid promotion plan. The idea of rapid promotion seems to have originated with Superintendent William T. Harris when he was Superintendent of Schools in St. Louis, Missouri. Superintendent Harris was one of those rare educators who possess intuition and foresight. As early as 1868 he had a real conception of the needs of the capable child. He met the situation¹ by devising a system by which bright pupils could be promoted more rapidly. Each grade in the St. Louis schools was divided into four sections and classified according to brightness so far as the teachers were able to estimate brightness. As soon as possible matters were arranged so that each section was about one-quarter of a year's work ahead of the next one behind it and one-quarter of a year's work behind the section just ahead of it. Promotions were made at the end of each quarter instead of annually. This made it easy to give frequent double promotions to bright pupils. In this way the bright pupils skipped part of the work but, being bright, they were supposed to make up what they had skipped with little or no help from the teacher and still keep up with the group into which they had been promoted.

The Harris plan attracted much attention at the time and several modifications of it were tried elsewhere. Super-

¹ A more complete discussion of the several plans of promotion may be found in Holmes, W. H.: *School Organization and the Individual Child*, pp. 1-86, Davis Press, 1912.

intendent Shearer of Elizabeth, New Jersey, divided each of the eight grades of his schools into three or four sections. Each section was then permitted to advance at its own rate of speed. Promotions were made from one section to another whenever the individual pupil was thought to be ready for promotion.

In Cambridge, Massachusetts, and at Le Mars, Iowa, a double track plan of promotion was used for many years. The pupils of the first grade were classified into bright and dull sections. The bright sections were advanced fast enough to complete the course of study in six years, while the dull group progressed at a rate that would allow them to complete the same course in nine years. If it developed that some of the children were wrongly classified, it was possible to transfer them from one track to the other, particularly at the end of the second and fourth years.

At Portland, Oregon, the course of study was constructed in fifty-four parts, to be covered by the average pupil in eighteen terms of five months each. This was equivalent to three parts per term for the average pupil. The slow pupils covered two parts per term and the bright pupils progressed at the rate of four parts per term.

In North Denver Superintendent James H. Van Sickle organized his school so that promotions were made semi-annually. For finer adjustments each class was sectioned within itself. It was thus possible for a pupil to proceed at different rates of speed in different subjects.

In New York City the constant and shifting group plan was used with considerable success. The children who were put in the constant groups were supposed to remain there for a definite period of time. Promotions were made only at stated times. The children in the shifting groups were classified "according to their power to really grasp a new

point." Promotions were made whenever they appeared necessary.

All these plans rest upon the basic assumption that an increase in speed is an adequate solution to the problem of the bright child. Such an assumption works well for a while but serious results are inevitable in the long run. For example, bright pupils who finish nine years of work in six are ready intellectually to enter the tenth grade at the age of twelve or thirteen. They finish high school and enter college at the age of fifteen or sixteen. This is unsatisfactory from several points of view. A child who enters high school at the age of twelve is under a serious disadvantage. Capable children at this age are usually able to make fair grades in the high school, but in every other way they are misfits. They are thrown continually with children who are older physiologically and socially. They are still in the preadolescent age and are much out of place at the social functions of the school. In literature they are too young to grasp the emotional significance of much of the material. They have no chance at athletics and present sorry figures in the music class and in the literary society. At fifteen or sixteen they are too young to be sent away to college and much out of place if they are sent. The author of this chapter had the misfortune to enter college at the age of eighteen where the student body was composed of grown men for the most part. He had achieved some success in a childish way at his literary work in high school. At college, however, when he arose to declaim or debate he was beset with a horrible stage fright. His thoughts refused to function, his mouth got dry, his own voice sounded unfamiliar to him, and his knees knocked together in mortal terror. In his adolescent state he imagined that the idea he possessed ability as a speaker was all a mistake, and he forthwith fell into an inferiority complex which lasted

for years. The real reason for this unhappy condition did not dawn upon him for a long time. He was being forced to pit himself against men who had had years of experience at public speaking. He was the victim not of inherent personal unfitness, but of the evils of a bad school organization. "Giftedness" is more than the ability to get one's lessons quickly; and any scheme of instruction that is based upon this ability alone is unfair and intolerable, however good its other qualities may be.

The injustice of the rapid promotion scheme has long been recognized. More than twenty years ago instructional schemes began to appear which were based not upon time, but upon subject-matter units. The first of these seems to have been what was known as the concentric plan, at Santa Barbara, California. Here each grade was divided into three sections. The slow section covered only the minimum essentials of the subject matter, the middle section did work that was more extensive, and the bright class did still more extensive work. A variation of this plan was put into use at Batavia, New York. At Batavia the children were kept together but two teachers were employed for each class. One teacher did the work that a teacher ordinarily does, while the other one spent her time helping the pupils who were meeting with difficulties.

Both these plans attracted much attention and both have a distinct advantage over the rapid promotion scheme. All the older plans, however, suffered from one serious difficulty. The pupils were being classified according to the teacher's judgment alone. The results settled apparently for all time the inadequacy of the teacher's judgment as the sole basis of classification. In many places the rapid sections became filled with high grade morons with highly developed rote memories and the slow sections were composed of highly

intelligent but lazy pupils. These slow sections finally upset the whole system and cast such a spell of discouragement upon teachers and educators that little or no progress was made until about 1918, when the first group intelligence test appeared.

In the meantime yet another method of dealing with gifted pupils was being developed. Superintendent Preston W. Search was the pioneer in this movement. Superintendent Search believed that the source of the trouble lies in the group plan of instruction. Accordingly, in his schools at Pueblo, Colorado, he instituted the plan of allowing each pupil to proceed at his own rate. The ordinary class recitation was abolished and the schools were turned into educational laboratories. The teacher spent her time with each pupil as an individual. Search wrote a book entitled *An Ideal School*,¹ in which he described his plan. Under the influence of Search's ideals, Superintendent F. E. Spaulding put a similar plan into effect at Newton, Massachusetts. Here "unassigned" teachers were appointed to assist the regular teachers in a manner much like that in the Batavia plan.

About 1912 a still further advance was made in the application of Search's ideals. President Frederic Burk instituted a plan of individual instruction in the San Francisco Normal School. The details of the Burk plan are given in Part II of the *Twenty-fourth Yearbook* of the National Society for the Study of Education.² The plan is an improvement over the Pueblo plan in the fact that curriculum material is better adapted to the needs and abilities of the pupils.

Burk's plan has been developed still further by Superin-

¹ Search, Preston W.: *An Ideal School*, Appleton and Company, 1901.

² National Society for the Study of Education: *Twenty-fourth Yearbook*, Part II, pp. 60-77, Public School Publishing Company.

tendent Carleton Washburne at Winnetka, Illinois.¹ Superintendent Washburne and his teachers started out by making a careful analysis of the curriculum. The curriculum was divided into elements or goals. These goals were carefully graded. Goal books were provided and put into the hands of each of the pupils. If a pupil met with difficulties, he was referred to sets of practice exercises in the goal book. Recitations in the formal subjects were discontinued for the most part and each child was permitted and encouraged to go his own way and at his own rate.

All the plans for individual instruction are a distinct advance over mere rapid promotion under the group plan of instruction. They all possess certain disadvantages, however, which interfere very much with their introduction in a general way.

The preparation of the pupils' goal and practice books is expensive. It places upon supervisors and teachers all the burden of authorship and makes the school board a publishing organization in a manner hitherto unknown. It is evident that such a scheme requires teachers of a calibre and training quite rare as yet.

The system has another disadvantage that is still more fundamental. So far as the authors are able to interpret it, there are no provisions for the qualitative differences which exist between bright and dull pupils. It is still beset with the notion that capable pupils are adequately provided for where they are allowed to do more work in a given time. Such a proposition is unsound. An outstanding characteristic of

¹ For details see:

National Society for the Study of Education: *Twenty-fourth Yearbook*, Part II, pp. 77-82.

Washburne, Carleton W.: "Educational Measurement as a Key to Individual Instruction and Promotions," *Journal of Educational Research*, Vol. V, pp. 195-206.

dull pupils is their ability to do and enjoy minutiae. This is just the thing that bores the capable pupil. His ability consists in just the opposite sort of thing. He can do minutiae but he much prefers to consider the broad and fundamental relations which exist in the universe of knowledge. He is interested in generalizations, in fundamental principles, and in creative activity.

The whole idea of trying to educate gifted pupils by feeding them huge amounts of pabulum that is suited to morons seems rather absurd. No such proposition is true in feeding the body. Mental food for a dull child should be analogous to bodily food for an invalid. Some invalids can eat only poached eggs. Now suppose someone should be called upon to cook for a day laborer or a lumber-jack. Such men must have large amounts of food. They are seldom troubled with indigestion. Suppose also that the cook reads somewhere that one poached egg is a reasonable meal for an invalid and argues therefrom that the thing to do with the lumber-jack is to keep him full of poached eggs. The absurdity of such an idea is manifest. Men who work hard at manual labor need a rich and varied diet. In like manner capable pupils cannot thrive unless they have a rich and varied mental diet. This is apparently a fundamental weakness in all schemes of individual instruction that have yet appeared. They all seek to develop genius with a poached egg diet.

During the past few years another plan of instruction has been started that appears to have much value for capable pupils though there is no evidence that the author of the plan intended it for that purpose. The reference here is to what is known as the Morrison plan. This plan is based upon a general scheme of secondary education which Professor Morrison has been advocating. The plan itself is being devel-

oped at the elementary school that is maintained at the University of Chicago. A published description is now available of the plan as applied to the field of history.¹

The Morrison plan is related to the movement started by Superintendent Search. Search's plan has been improved upon from time to time by providing more definite units of subject matter. Burk used better units than Search and Spaulding had. Washburne established his units of goals by careful scientific measurement. Morrison also has much to say concerning units. His units are broad and comprehensive and thus present a qualitative distinction. Broad units of thought material are well suited to capable children. Because of this, the Morrison plan is well worth the study of those who are interested in the education of the gifted.

But the unit plan has its disadvantages also. In the first place, the teacher who uses it successfully must have an unusually broad perspective of subject matter. She must also have plenty of time to identify and outline her units and look up the references. In the second place, the plan assumes also that facilities for mimeographing are abundant. Some of these requirements are missing in most of our schools. Finally, there is a more fundamental objection to the plan. The whole scheme is tinctured with Morrison's idea of mastery. This mastery notion is related rather closely to indoctrination. The units and outlines are constructed in dogmatic form by the supervisor or teacher. The cat is out of the bag as soon as one reads the title "Assimulative Material," which appears in large letters at the beginning of each unit. Bright pupils have little chance to make out outlines for themselves or to express their own ideas. There are no provisions

¹ Bailey, D. C.: *A New Approach to American History*, University of Chicago Press, 1927.

for constructive activity and no place for pupil inferences or pupil generalizations. The high grade moron who can memorize the thought of someone else can succeed well with the Morrison material. Of the exploratory idea there is not a trace.

Yet there are some things with which capable pupils should be indoctrinated and some things which they must master. For this part of the education of the capable pupil the Morrison plan is well adapted.

Another scheme that is capable of adjustment to the gifted pupil is the Dalton plan.¹ The author of the plan describes it as an administrative device rather than a scheme of curriculum organization. Each pupil is given a series of related jobs. Each job is outlined and a copy of the outline is placed in the hands of each pupil. Jobs are divided into units. Each unit corresponds approximately to one day's work, but the pupils are not required to complete one unit per day. Some may do more than that and some will do less. Pupils are permitted to finish all the units in one assignment before they begin those of another if they wish to do so. They may work alone or together. If some of the pupils finish their job in less than the required time, more units are provided for them.

It is obvious that the Dalton plan possesses great possibilities for the capable pupil. The realization of these possibilities lies with those who administer the plan. If capable pupils who finish a job in less than a day are allowed to go on with the next day's job, they will eventually finish school too soon; and the whole plan will be open to the objections which

¹ For further details see:

National Society for the Study of Education: *Twenty-fourth Yearbook*, Part II, pp. 83-94.

Dewey, Evelyn: *The Dalton Laboratory Plan*, E. P. Dutton and Company, 1922.

apply to all other schemes of rapid promotion. On the other hand, it is possible to plan the jobs and even the daily units so that the additional material needed by the capable pupils will relate to the same job or unit and also be characterized by the qualitative distinctions that these pupils need so badly.

A very promising effort of this sort is now being made at Ambridge, Pennsylvania, under the supervision of Superintendent Samuel Fausold. At Ambridge an effort has been made to present daily units which contain qualitative differentiations. Each unit, or assignment, is constructed so as to include three levels of work. The units are divided into A, B, and C sections. All the pupils are usually expected to work out the C, or easy, portion of the assignment. The average group of pupils is expected to cover all of sections B and C, while the bright pupils must complete all three sections. The A section is composed of items which aim to stimulate constructive thinking and creative activity of all sorts.

According to the Ambridge plan no sectioning or classification is required. The class is kept together and the advantages of group instruction are secured without its disadvantages. On the other hand, the advantages of individual instruction are also secured. There is neither lock step nor marking of time. Each pupil has an opportunity to work to the best of his ability on material that is suited to his needs. Outlines are usually made to cover a week's work for the brightest pupil in the school. The remainder of the pupils do as much of the assignment as they can. When the next week comes all the pupils receive the same new outline.

The following outline is one that was put into the hands of the pupils :

DIFFERENTIATED ASSIGNMENT FOR SIXTH-GRADE GEOGRAPHY

Assignment No. VII

Text:	Tarr and McMurry, pp. 31-33	First semester
Reference:	<i>Human Geography</i> , p. 128	First quarter
By:	Miss Johnson	Seventh week
		Oct. 19-23, 19—

What we want to learn from this lesson

- I. Some important facts about the New England states
 1. Names of the New England states
 2. Boundaries of the New England states
 3. Surface features
 4. Climate
- II. Some effects of glacial action in New England
 1. Region covered by the glacier
 2. Work of the glacier

Introduction

In the past few weeks we have learned of the glacier and its effect upon North America. This week we shall take up a study of the New England states, over which the glacier passed. We shall be interested in learning how the glacier made New England rough just as easily as a boy can make the same changes in the street, road, or field after a rain.

How to study this lesson

- I.
 - 1 C. Draw an outline map of the New England states.
 - 2 C. Learn the names of the New England states.
 - 3 C. Be able to locate the New England states on your map.
 - 4 C. How does the New England group of states compare with Pennsylvania in size?
 - 5 C. What kind of coast line has the New England group of states?
 - 6 C. What are the following: Champlain, Merrimac, Green? Locate each.
 - 7 C. What kind of winters do they have in New England? What kind of summers? Is there much *rainfall*?

- 8 B. To what extent do the mountains make the surface of New England irregular?
 - 9 B. What two large islands lie southeast of Massachusetts?
 - 10 B. Be able to name three important rivers, three important lakes, and two mountain ranges of this group.
 - 11 A. Take each state of the group and give its boundaries.
 - 12 A. What large island lies south of Connecticut?
 - 13 A. What has made the coast line of New England irregular? Explain.
 - 14 A. Bring in a descriptive paragraph on "Scenery of New England." The material for this paragraph may be secured from Compton's *Encyclopedia*, the *Work Book*, or other sources. Bring this in on Tuesday.
- II.
- 1 C. What do you mean by the glacier?
 - 2 C. What states of the New England group were reached by the glacier?
 - 3 C. The glacier changed the surface of New England in several ways. Make a list of these changes.
 - 4 B. From the above list, check the changes you consider most important.
 - 5 B. Name three islands formed by action of the Great Glacier.
 - 6 A. How has the glacier determined the occupations of men in the New England states?
 - 7 A. Bring in a paragraph on the effect of the glacier in the eastern part of the United States. Bring this in on Wednesday.

Things to do

Bring to class all the pictures, clippings, and extra material you can find on the New England states.

Things to think about

Recall what you have learned of the Pilgrims and the *Mayflower*. How does it connect with the New England states?

A final type of method that is adaptable for use in teaching capable pupils is the problem-project type of instruction.

The term *project* is borrowed from agriculture but the project method owes much to the problem method that preceded it. The problem method was in great vogue about fifteen years ago. It considered curriculum construction for the most part the setting of series of problems. The aim of education was defined in terms of teaching pupils to solve worth-while problems. Clearly this was another movement by which the gifted pupil could profit. The main defect in the scheme of instruction through problem solving was the lack of a means whereby any particular child could meet with the particular problems which were best adapted to his needs.

In an attempt to meet this defect the project method was devised. A project was defined at first as "a whole-hearted purposeful activity," with the emphasis thus on pupil interests. But the original idea was not accepted everywhere. As soon as it appeared that the term *project* was going to have a commercial value, a number of people began to apply it to almost anything they wanted to write or publish. When it was pointed out that their use of the term was not in line with its original use, each writer began producing his own definition of a project.

The leaders in the older method, the problem method, of instruction were quick to see how closely the new project method was allied to what we already had. Some of them claimed that the project method was simply a new name for an old thing. They were inclined to adopt the new term for the old procedure. Others were inclined to take the middle ground and define a project as a "problematic act carried to completion in its natural setting." Thus it happened that the project movement was hampered because of a lack of exact agreement as to its meaning.

The project method has other disadvantages and limitations also. It requires a breadth of experience which most teachers

do not possess. It burdens the teacher with curriculum making and forces her to write her textbook. It is also open to the fundamental objection that it lacks an integrating technique. If pupils are allowed to work only at that for which they can be made to feel a conscious purposeful urge, they are likely to miss valuable parts of the stock of knowledge. In addition to this, it is quite difficult to engender in the average young American a conscious purposeful motive to learn the multiplication facts or to spell correctly.

In spite of all these defects, however, the project method, as originally defined, has excellent possibilities for the capable pupil. It provides for his tendencies to action and creative effort and inspires his emotional urge. Where proper problems are set or discovered limitless opportunities may be provided for practice in seeing likenesses and differences. The experiment that is to be described in the remaining chapters of this book grew out of an earlier experiment that one of the authors had carried on, based on the problem method. Something of the nature of the earlier experiment is indicated in the following outline, which describes the first attempt to combine the problem and project methods. The outline is based upon a problem study of coal. In the original experiment the pupils were required to read references until they were able to solve the problems about coal, whether they were interested in coal or not. The problems themselves were included as they are because they were the particular ones for which answers could be found in the books that happened to be in the school library at the time. The outline is reproduced here only as an example of what was done in combining the problem and project method. It is out of date now and consequently incomplete. The outline was not used in the more recent investigation because none of the capable pupils at Appleton were interested in coal. The Appleton experiment consisted

in finding out what the pupils were interested in and then writing an outline dealing with the desired material.

The outline that follows is a modification of one used by one of the authors in the schools of Carterville, Missouri, from 1910 to 1914. It was used as a model for the outlines that were used in Appleton.

QUESTIONS FOR DIRECTING SILENT READING ON THE SUBJECT OF COAL

1. How does a coal mine look?
2. How is the coal brought out of the mine?
3. How is coal weighed and sorted? What are coal breakers?
4. How is coal marketed?
5. What is a colliery? How is the coal moved and stored?
6. How is the roof of a coal mine supported?
7. How do the miners loosen the coal in the mine?
8. Why must coal mines be ventilated?
9. How are explosions prevented in coal mines?
10. Find anything of interest you can concerning Sir Humphry Davy.
11. How are coal mines ventilated?
12. What is coal made of? How is water kept out of the mines?
13. How can we tell that coal was once wood?
14. How did it happen that the wood turned into coal instead of rotting?
15. How long does it take for wood to turn to coal?
16. Is wood turning into coal now?
17. What is peat? Lignite? Bituminous coal? Anthracite?
18. How do these differ from each other?
19. What did people think of coal in the past?
20. How did they discover that it would burn?
21. How did people learn to burn anthracite?
22. Find out anything you can concerning the great fire in the coal mines of southern Ohio. How long has it been burning? How

did it start? How much damage has it done? Will it ever be put out?

23. How is the amount of coal possessed by a country related to the prosperity of that country? To the ability of the country to make war?

24. How much coal does each of the following nations possess: England, France, Japan, Germany, the United States?

25. Judging by the amount of coal which they possess, see if you can find other nations which are likely to become great industrially.

26. Where does Wisconsin get coal? Are there any coal mines in the state? If so, where?

27. What railroads bring coal to Wisconsin?

28. Find out anything you can about Texas, Upper Silesia, and the Saar Valley.

29. How is artificial gas made?

30. How did people learn to use gas?

31. What other things can be made from coal?

32. How do prospectors search for coal?

33. How many large cities can you find in the United States which have grown up because coal mines are near them?

34. What substitutes can be used in the place of coal?

35. Is it likely that any of these will be used to any great extent in the future? Why?

36. To what extent is Wisconsin using a substitute for coal?

37. What cities are being particularly affected by the use of a substitute for coal?

REFERENCES ON COAL

* Allen, Nellie B.: *Geographical and Industrial Studies: United States, New Europe, South America*

* Bishop, A. L., and Keller, A. G.: *Industry and Trade*

* Brigham, A. P.: *Commercial Geography*

Bureau of Mines: *Mineral Resources of the United States*

* Chase, A., and Clow E.: *Stories of Industries, Book I*

* The starred references are the most important ones.

- * Fisher, E. F.: *Resources and Industries of the United States*
- * Herrick, C. A.: *A History of Commerce and Industry*
- Holton, M. A., and Curry, C. M.: *Lights to Literature*, Book V
- Martin, E. A.: *Story of a Piece of Coal*
- Mowry, W. A., and Mowry, A. M.: *American Inventions and Inventors*
- * Rocheleau, W. F.: *Great American Industries*
- Smith, Russell J.: *Story of Iron and Steel*
- Strong, F. L.: *All the Year Round*, Book II
- * Tappan, Eva M.: *Diggers in the Earth*
- Tolman, S. W.: *Around the World*, Book II
- * Williams, A.: *Romance of Mining*

* The starred references are the most important ones.

CHAPTER VI

HOW TO DISCOVER THE GIFTED, SUPERIOR, OR TALENTED PUPILS IN SCHOOL

PROGRESSIVE educators are becoming more and more awake to the gross waste of unused possibilities in our gifted, talented, and superior children. There is a keen feeling that the public should be informed of the seriousness of this neglect in the hope that public sentiment will demand adequate care for these children. It has been estimated that in our American schools there are a million or more pupils¹ whose verbal intelligence is of a high order. Many of these pupils belong to the socially gifted to such an extent that they are now the leading citizens of their school and later will be the leading citizens in their communities. They are the managers of teams and the presidents of classes, clubs, and literary or debating societies. Later some of them will become the chief executives of cities, towns, and states, leaders in business, and presidents and organizers of chambers of commerce and Rotary, Kiwanis, and Lions clubs.² They will succeed to some extent, without a school education, and even in spite of it. But this success will be only illusory. No one really succeeds until he has done his best. The school must help bright pupils succeed by helping them do their best at that which they can do. But high verbal intelligence is only one type of the gifted. Some children are mechanically gifted.

¹ Rugg, Harold: "Education of Gifted Children," *Twenty-third Yearbook*, Part I, p. 91.

² *Ibid.*, p. 92.

The mechanically gifted deserve attention also, for they are the source from which our engineers and inventors come. Our supply of good engineers and inventors is not overstocked, and no one would object if we could improve the quality of our present product. The best way to obtain more and better engineers and inventors is to see to it that all of our source material is discovered and developed.

In like manner we should discover and develop the aesthetic talent of our people. From this class come our artists, musicians, and dancers. Their talents and gifts are dormant possibilities, and without the help of the school they are not likely to be aroused.

There are those who say that talent will out and that it will come to the surface and exert itself in spite of all obstacles. This has been true in some cases. Paderewski¹ was discouraged from taking work on the piano because his reach was not long enough to cover an octave on the keyboard. Caruso² was told his voice had very limited possibilities. Schumann-Heink was told by the director of the Hof Opera in Vienna that with her face and personality she could never hope to be a singer, that she was more fitted to go home and run a sewing machine.³ Paderewski, Caruso, and Schumann-Heink succeeded in spite of obstacles and their accomplishments will be an inspiration to those who attempt to emulate them. Such genius as they possessed simply had to manifest itself. But to believe generally that genius will out of its own accord is leaving too much to chance. Undoubtedly the world has lost many works of art, many masterpieces of literature, many mechanical inventions, and many scientific discoveries because circumstances did not call them

¹ "Paderewski, A Great Man," *World's Work*, April, 1923.

² *Musical America*, August 6, 1921, p. 2.

³ *Good Housekeeping*, January, 1927, p. 175.

forth. Talent, giftedness, and brightness may be compared to the germ in a seed of grain. In the seed the possibilities of life lie dormant. Before that life can be called forth to the glory of its full strength the seed must be planted in mellow, fertile soil and fed by warm rain and sunshine. If this does not happen, the germ will lie dormant until the possibilities of renewed life have worn themselves out waiting. So it is with talent and giftedness. They may make themselves known by some external sign, but they will not grow unless conditions are such as to stimulate growth. And again, after they have started to develop, they must have a constant supply of mental food, in order to gain strength for further growth. There are many pupils with much dormant ability in our schools. The next big step in education should be to care for them in such a way as to give them the type of training that will turn their possibilities into positive contributing forces. But we are not agreed as to the value of encouraging talent. Large numbers of our people are afraid to encourage it. They assert that such encouragement leads to overdevelopment and undesirable types of precocity.

INTEREST SHOULD BE ENCOURAGED

The question is often asked: "What shall I do with John? He gets his work in school easily and the teacher wants to promote him, but folks say that, if he advances rapidly, it will injure him."

Not long ago a father asked one of the authors if he should answer all the questions his two-and-a-half-year-old son asked. The boy's grandmother had told the father it was cruel to answer all the questions because so much knowledge would hurt the child. It so happens that the little fellow has an intense liking for automobiles. As young as he is he recognizes various makes of cars and their trade marks. When-

ever his father points out a car to him, telling who the owner is, he remembers. He recognizes the various cars in the neighborhood and has them placed correctly as to ownership. The boy seems to be full of questions and he continually asks them. The father asks: "Shall I continue to answer the boy's questions? If not, what should I do?"

Why shouldn't he answer the boy's questions? The intellectual self craves food just as does the physical self. This is a proposition that will not be denied. But there is a further proposition that is even more important — one which unfortunately is almost universally misunderstood or ignored. To say that the intellectual self craves food is not sufficient. To stop here is to ignore a proposition that is fundamental in dealing with gifted pupils. We must not forget that different intellects, like different bodies, require different amounts and different kinds of food. The amount of food that is needed depends upon the character of the intellect or body that is to be fed. A given amount of food may be entirely too much for some people and entirely too little for others. Mental growth increases only when the mind is properly fed. If food is denied, the intellect suffers just as does the body. It shrivels in proportion to the lack of food. The lack of food means starvation, or at best stagnation.¹

Nothing can stand still: it must grow or decay, proceed or recede. A well balanced mental ration makes possible the greatest growth with the least effort. John is suffering from an inadequate mental diet. He is in danger of failure to grow and even of mental death from starvation. "What shall I do with John?" Give him food, by all means, and let him eat. And remember that what is enough for him is entirely too much for half of the pupils who come to school.

¹See Rohan, Ben J.: *Exploratory Science: A Means of Life Guidance*, Chap. IX, C. C. Nelson Publishing Company, Appleton, Wisconsin, 1930.

The little fellow who asks many questions and knows several kinds of automobiles at the age of two and a half years has elements of brilliance in him. His intelligence quotient is at least 150. He has a chance to make himself famous and to put the name of his birthplace in the pages of future history. If he misses his destiny, it will be because no one will answer his questions and because all the urge to achieve is crushed out of him by a stupid educational treadmill.

Mental starvation is not the worst thing that can happen to a gifted child. Nature has a way of avenging herself. One seldom sees a piece of land lying idle; if man does not use it, nature does. If man does not grow food, timber, or the like, nature will grow something. One's mind is like a garden; it needs to be fertilized, cultivated, and controlled. It needs to be developed according to a plan. Much watching and persistent effort are necessary. Seed must be chosen carefully, and weeds must be excluded. If one is not constantly on guard, the weeds will smother the desired crop. A strong mind demands activity. It will react to good ideas if they are provided; if they are not, it will find something else to act upon, and this something is not always desirable. In former days, for example, we had much fighting on the school ground. Now fights are rare. The reason for this very desirable improvement is not hard to find. In the old days the recess was a free period, when the children had to provide their own amusement without any assistance in the form of playground equipment and supervision. The children stood around with nothing to do, and the result was trouble. But now with baseball leagues, soccer football, basket ball, giant strides, and the like, the free periods are so filled with purposeful activity that there is little time for trouble. The children's minds are interestingly engaged. Pool rooms produce many bad boys and men because those places do not afford wholesome occupa-

tion for the mind. The bad creeps in and soon dominates for lack of resistance. All capable children have possibilities of evil as well as good. Those who are neglected or suppressed by the school are likely to profit by the sinister education of the street. Mental starvation is not the worst thing that can happen. "What shall I do with John?" is indeed a momentous question. Its answer may change a future criminal into a valuable contributor to human culture and knowledge.

The identification of gifted children is, therefore, a matter of major importance, and it is well worth while to discuss what the earmarks of talent are. The purpose of the remainder of this chapter will be to describe these earmarks in some detail.

PUPIL INTEREST AS A SIGN OF TALENT

Interest is an unmistakable sign of intelligence. An active, inquisitive, exploring interest is prompted by a curiosity to know and to learn. Back of it there is usually a capacity to assimilate. An interest should be fed even though it ranges from making tin can toys, mud pies, and toy engines to composing minuets and poetry and painting pictures. Such feeding will require some effort and some material. The home must help provide both. The tools required may be the choicest ones in the father's kit. "What?" says some thrifty father, "you say I am to let my boy use my best tools? What an absurd idea. He will spoil the tools and more than likely he will lose them." He most certainly will unless dad does some work at the job himself. Little boys and girls do not know how to use tools. How could they unless someone has been interested enough to teach them how? Right here is where dad's job comes in. Children who are interested in tools can be taught to use them properly. They will make some mistakes at first, as everyone does, but they will learn some

valuable lessons thereby. Everything that is worth while has its price, and all parents must pay the price, one way or the other. It is infinitely better to have a boy busily engaged at his father's work bench, at the price of a few tools lost or broken, than it is to have him hating his home and longing to get away from it because the command "Hands Off" is written on all that it contains.

Not long ago one of the writers attended a men's discussion club, which was led by an elderly farmer. The discussion was on Christ as a boy in Joseph's carpenter shop. The question arose, "Did Joseph allow the boy Christ to make free use of his tools?" This induced the leader to volunteer some information regarding his boyhood. As a boy he liked to build toy barns. It seemed that he was always on the lookout for material for them. His interest was so keen that, even when he was old enough to hire out as a chore boy, he would go down, after his day's work, to the shore of the lake, near which he worked, and pick up pieces of boards. There were lumber mills along the lake; pieces of lumber frequently went adrift, and some came to shore. "Where did you get the tools with which to work?" he was asked. Well, his uncle was a real man, a natural teacher, for he loaned that boy all the tools he wanted. What was more, he sharpened the tools for the boy and showed him how to use them. When asked if he was not afraid that the boy would dull or spoil the tools he would say, "Perhaps the boy will dull and spoil the tools, but the tools will not spoil or dull the boy." Undoubtedly the uncle was right. This class leader, as a boy, thought out and built a new type of barn. When he grew to manhood and lived on a farm of his own he built the type of barn on his farm that he, as a boy, had thought out and built for a toy.

Wholesome interest in a good subject is a blessing. It is natural; it is nature's way of keeping the mind awake and

growing. Why *shouldn't* the bright pupils be given the privilege of following their wholesome interests? Why *shouldn't* the teacher — knowing that trouble will follow if their time is not profitably occupied — find an interest for those who have not one? And why *shouldn't* the children be fed mental food as rapidly as they can naturally assimilate it?

It is not the dull child who gets into mischief or who is a problem in discipline. He usually is not original enough to think up ways of bothering the teacher or school authorities. He is a follower and does what others have worked out or suggested. In cases of robbery and banditry there are one or more people called the "brains" of the gang. They gather facts, study situations, and make plans, using the results of their studies as a basis for future action. Usually there are others to carry out the plans made by the "brains." Often these "brains" would have been fertile in producing good things, if interest had been aroused in good projects. "Scarface" Al Capone is an illustration of this. Many of our successful people were dubbed "bad" in school because their teachers did not understand that their efforts in mischief were due mostly to lack of interest in the classroom routine. All of this shows the importance of interest as an earmark of gifted pupils and as a guide in their instruction.

CLASS STANDING IN SCHOOL AS AN INDICATION OF TALENT

Class standing has been the criterion upon which our schools have depended almost entirely in their selection of bright pupils. In the schools of the past the bright pupil was the one who did well in his school subjects, and the unmistakable sign of brightness was to lead one's class in reading, writing, and arithmetic. But a second glimpse into the past reveals the fact that the formula for choosing bright children did not always work. There are many who were thought to

have been dullards in school who, according to their work in life after school days, were conspicuous for their remarkable accomplishments.

Steinmetz, when he died, was known as a wonderful mathematician; yet early in his school life he found it difficult to master the multiplication tables.¹ Charles Darwin was thought to be slow and below the common standard in intellect. Harriet Martineau's parents considered her mind not only dull but unpromising. Napoleon Bonaparte did nothing to distinguish himself while at the military school in Paris, unless perhaps in mathematics. In his final examination for graduation he ranked forty-second in his class. William H. Seward's teacher once thought that he was too stupid to learn. Patrick Henry was too idle to gain any solid advantage from the school opportunities that were thrown in his way. Instead, he went fishing and hunting for days and weeks at a time. His companions recall no times of premature wit, no strength of sentiment, no unusual fancy, no flash of beauty or strength of thought. So far was he, indeed, from exhibiting any one indication of his greatness that every omen predicted for him a mediocre life and some even thought one of insignificance. Robert Fulton was not considered bright, rather he was thought a dullard because his mind was filled with thoughts about other things than his school subjects. James Russell Lowell, when a boy, was considered negligent in themes, forensics, and recitation. Oliver Goldsmith's teacher, in his early childhood, believed him one of the slowest boys, mentally, that she had ever tried to teach. Henry Ward Beecher had a similar organization. He was often thought dull in early boyhood.²

¹ Hammond, J. W.: *Charles Proteus Steinmetz, A Biography*, pp. 35-36, The Century Company, 1924.

² Swift, Edgar James: *Mind in the Making*, pp. 5-19, Charles Scribner's Sons, 1909.

And to-day, as yesterday, there are thousands of children passing through our schools, or rather into and out of them, who are gifted, talented, or bright but who pass unknown, because there is not sufficient interest appeal in the classroom work. Their potentialities remain dormant and untouched. Their possibilities are undiscovered, and they become lost eventually in the great mass of commonplace humanity. Their God-given inheritances, through which they were to taste the joy of work and to experience the feeling of well-being which comes from doing well that which one is fitted to do, are to slumber on, waiting for mere chance to call them from their sleep. Some of them will find themselves by accident as others have done in the past, but for every one who will there are probably hundreds who will not.

Almost everyone can do something and do it well.¹ But in our school work we do not capitalize this potentiality. We incline to rigidity of organization and curriculum requirements, which puts all through the same mold, tending to make all conform to a similar shape, regardless of whether or not the material used is suitable to the object formed by the mold. There is some wisdom in having certain things done at certain times. There must be a place for formal training, regardless of the like or the dislike which pupils have for it. But to make formal training a major issue, and to make little provision for capitalizing the "native trends," is to sacrifice the enthusiasm of childhood and to lose the propelling power of interest.

The deadening effect of formal training soon makes itself felt in the schools. Soon after the second grade children often begin to lose their whole-souled interest in school work. This happens because we leave off pleasant ways of teaching and tend to teach knowledge formally. The formal knowledge

¹ Smith, William Hawley: *All the Children of All the People*, p. 28, The Macmillan Company, 1912.

prescribed in the schools of the nineteenth century seems still to be the objective of almost all our educational systems. By their demand for it the universities and colleges control the high schools, and the high schools in turn dictate to the grade schools. We seem to be afraid to break away for fear that the wrath of some ancient god will be turned loose upon us; but the minds of children revolt. They continually jump out of bounds and wander off into the dreams of interest. The offerings of the school are not a complete catalogue of human experiences and to be well versed in them is by no means a guarantee of success.

The problem of development is no simple one, and there is no general method. The curriculum of to-day, for the most part, is a heritage from the past. It contains many "essentials for mental growth." It would seem that their necessity is a part of the nature of things. Much time and energy are used in keeping children of varying capacities and endowments "in the scholastic trail." Meanwhile the Patrick Henrys laugh in their indolence, the John Hunters take to the woods, and the Charles Lindberghs find happiness and satisfaction in the air.¹

Some of the students who stand at the head of their classes, nevertheless, lack a great deal of being gifted. They succeed in formal school work because they have highly developed rote memories. A pupil may usually be at the head of his class, may seldom fail in a recitation or test, may do well in almost everything he is asked to do, and may still be not much more than a mechanically perfect machine. Such pupils know books and how to handle them. Little else is required by the school. Such pupils are excellent memorizers, but nothing more. Their counsel is seldom sought in solving class

¹ Swift, Edgar James: *Mind in the Making*, pp. 31-32, Charles Scribner's Sons, 1909.

problems. Their companionship is not courted. They may be almost recluses, if there can be such in a school. Their social age is often far below their classroom accomplishments.

On the other hand, there are those with average or medium standings in the classroom who have much natural ability but who do not use it. They score high in the intelligence and achievement tests but do not make good in the classroom. Somehow there is no appeal in the routine, and they do merely enough to "get by." Such pupils may become interested in extracurricular activities and make good at them. The classroom record cannot be taken as a true indicator of their ability.

Class standing in school as an indication of capability is objectionable from another point of view also. Cases have been reported of people who made splendid records as students, who were elected to Phi Beta Kappa while in college, who rose to positions of influence and leadership, but who could not successfully pass some of our tests of mechanical aptitude. One case was that of a prominent educator, whose scholarly ability was nationally recognized. He was a leader in his field; but when he was tested in a psychological laboratory, he was found to be deficient in the mechanical type of intelligence that was required successfully to pass the mechanical aptitude test.

Another case is that of a college student who was considered bright during all her college career. When given the above test she also failed in it. Upon further inquiry, it was found that all through her life mechanical manipulation had been extremely difficult for her. Another case is that of a college professor, who is an excellent linguist. He fell considerably below the standard for the test. These people have proven beyond a doubt that they are gifted or superior in abstract

intelligence. In mechanical intelligence their condition is quite the reverse.

On the other hand, there is equally positive evidence to show that a large number of those who fail in the formal work of the school can score high on a mechanical aptitude test. In like manner, it is well known that one's record in scholarship is not an adequate indication of his popularity or of his ability to make friends.

Class standing is therefore very unreliable as an earmark of brightness. It labels as bright many who are little more than glorified parrots, and it fails to identify many who have high mechanical or social intelligence.

USING STANDARD TESTS TO DISCOVER THOSE WHO ARE GIFTED

Standard tests have played a very important part in the identification of the gifted. They will stand out in the history of education as the outstanding contribution of the early portion of the twentieth century to the solution of our educational problems. We now have excellent instruments for identifying those who are gifted with high abstract intelligence so far as the ability to see likenesses and differences is concerned. We have, also, at least one good test of mechanical intelligence in terms of the ability to see likenesses and differences. We still lack a means of measuring pupils' interest and emotional urge, and we are entirely without a means of measuring social intelligence.

A beginning has been made also in the construction of tests that will uncover special talents. The outstanding example of this type is the Seashore Music Test. By means of it one can find those who have musical talent. The results are often surprising. It is not unusual to find the most promising talent in the person of some little urchin from a back alley or

from the foreign quarter. Let us hope that some day soon a more general interest will be taken in the discovery of musical talent, and that funds will be provided so that every musically talented child, no matter how poor or neglected, may have the advantage of a stimulating musical environment and a reasonably good musical instrument. The fields of painting, sculpture, drawing, and dramatics are still closed to us so far as standard tests are concerned, but we are encouraged to dream of a day when every community can and will take inventory of the talent that exists in its children.

Standard tests are a great help, but there are a few things to remember when using the results obtained from them. One does not inherit intelligence, as such: one inherits the potentiality or capacity to become intelligent.¹ From this one may believe that the score made on a test is not a true index to mentality. It may be more a measure of the opportunities one has had. If two children of about equal endowment are tested, one, because of environment, having had much experience and the other very little, the scores can scarcely be a measure of ability, because the potentialities may have been almost equal. Teachers must be constantly on guard to see that a "square deal" is given in such cases. If one has not had the chance to grow mentally, care should be taken not to construe the lack of opportunity as lack of innate ability.

Again, a test appropriate for one locality is not necessarily fitting for another. One should test for material or information in which the child has had preparation and with which he has had contact. It is not fair to score a pupil on the marks made in tests calling for reactions for which he has had no preparation. There should be in the mind of the examined some guiding principle, some definite situations or bodies of facts, which are the foundation from which he may reason

¹ Colvin, Stephen S.: *Twenty-first Yearbook*, Part I, p. 11.

and think. Before this can be done there must be a background of concrete and abstract experiences that have been brought about by genuine teaching and directing. Standard educational tests, when used with the foregoing suggestions, give a splendid basis for measuring and comparing an individual's accomplishments with those of others throughout our school system.

One must remember, too, that tests measure only part of the mental make-up. They cannot be taken as a measure of a whole cross section of the mind. Results may therefore be misleading because they do not give a complete measure of the individual.

Test results are subject to inaccuracies due to the emotional and bodily condition of the pupil when the test is given. The weather may be dark, gloomy, and rainy; this tends to impair one's efforts. The child may not feel well. He may have a toothache or a headache or be hungry. He may be bored if the test is given at the close of a school day, when ennui is at its height. Or perhaps the pupils sitting near the one being examined annoy him to such an extent that the results are not a true gauge of ability. Children are often subject to emotional disturbances. Such disturbances are frequent during adolescence. These upheavals are of short duration, but they are keen and overpowering while they last. How can one in the adolescent age do well on a test when one's best friend has proved disappointing, when one's lover seems false, or when one's idols are in the dust?

Disgust at physical conditions may upset a pupil and prevent a good score on a test. A case of this kind happened to a girl in an eighth grade who had tested consistently a grade or more above standard in the Thorndike-McCall Reading Test, Otis Intelligence Test, and Kirby Grammar Test, besides being an "A" grade student. She was sitting by an

over-age, mentally deficient boy, whose habits of cleanliness were not of the best. He so affected her that she fell two grades below standard in the Stone Reasoning Test, in spite of the fact that she usually did very good work in arithmetic.

A sixteen-year-old boy had been classified, by an expert in tests and measurements, as being subnormal; but he led his class in a test that correlates high with intelligence. The reason for this anomaly is not clear. It may be that the boy cheated. At any rate, there was no question about his mental state; but if this test alone had been used, the boy would have been misclassified.

In another instance a youth who was a leader in his class was given a test, on which he made a very low score; in fact, the score was so low that the tester became alarmed and reported to the teacher that the boy was decidedly inferior. When the case was investigated it was discovered that the examiner, unknowingly, had made the child angry with his questions or the manner in which he asked them, and that the boy had intentionally given the wrong answers.

These cases are not cited as an argument against the use of standardized tests, but to call attention to some of the pitfalls in testing. The standardized tests *are* a splendid means of helping to discover the gifted child.

Yet an elaborate system of testing is not necessary. For the most part, tests measure verbal intelligence. They really uncover only those who can function in that way. In connection with the study to be described in later chapters, the Thorndike-McCall Reading Test, Stone Reasoning Test, Haggerty Intelligence Test, and Kirby Grammar Test were used the first year. It was found that, when a child functions well in one, he usually does likewise in the others. Consequently, it was not thought necessary to give all the tests to get what was wanted. Those who did well in the reading test

usually did well in the others. So after the first year (the experiment ran for five years) we confined ourselves to the Thorndike-McCall Reading Test, using different forms at different times. However, any good reading test can be used. Each fall the test was given, and those who were up to grade in this test were usually found to be up to grade in their class work. So if the pupils stood well in the test and in their class work, they were eligible for membership in a club. The clubs were not confined to just a certain per cent of the classes, because there is little agreement between educators as to what per cent is bright. Some say a small fraction of one per cent. Some say take the upper ten per cent. All these estimates seem to be based upon verbal intelligence. Those who are mechanically, socially, and aesthetically superior are likely to be overlooked. These are just as important as the others and their abilities should not wait for mere chance to uncover them. So admission price to the clubs was not high. It was much preferred to have some in the clubs who did not belong there than to leave out some who should have belonged.

TEACHING METHOD AS RELATED TO THE SELECTION OF THE GIFTED

The teaching itself often is a deciding factor in calling forth the possibilities in pupils. If it is the regular routine of hearing classes recite dry, dead material in a colorless way, the method of teaching will continue to exact its deplorable amount of toll in overageness — its toll of discouragement, which causes many to drop out before they are prepared to do anything well, and its toll of dislike for accomplishment based on intelligent study. Such a method will do little but thwart, pervert, and damn. If we, as teachers, are held responsible for our sins of omission, for our failing to cause more pupils to find their best selves, few of us will be blessed with a pleasant

memory when we grow old and retire. Thousands of children have failed in school and in life because their teachers did not help them to find themselves. Some teachers are too busy covering the course of study. Some are repressed by superiors who are afraid to let them deviate from the dear methods of the past. Others are interested in teaching only as a means of making a living.

The findings in the New York investigation of school elimination show that a vast majority of those who dropped out of school did so not because they could not do the work, but because they were not willing to do it.¹ Frequently, nonproduction is taken as a sign of dullness, when it may be due to the fact that the child is only bored and cannot bring himself to the place where he is willing to be pressed through the mold and ground up in the machine. Children of this sort are likely to be scolded by their teachers, and thus elimination is hastened. Here is an example of such a situation. A high school pupil who was an average, timid boy in the adolescent period did not like to stand and recite in the class. The teacher took this as an excuse to make a sarcastic remark, which caused the boy to leave school. Thomas Edison tells in his autobiography of a similar early experience.² He was considered dull by his teacher and unpromising by those who knew him. The attitude of his associates depressed him. He felt that all had lost confidence in him and made little progress in school. On one occasion, when the inspector was present, the teacher publicly called him a name which gave the inspector the idea that he was dull. Edison was so crushed that he wished to give up going to school, but his mother, with a

¹ Van Denburg, Joseph K.: *The Junior High School Idea*, p. 15, Henry Holt and Company, 1922.

² Dyer, Frank Lewis: *Edison, His Life and Inventions*, p. 16, Harper and Brothers, 1910.

motherly instinct, would not let him give up and gave him strength to go forward. Edison, to-day, says that he owes everything that he is to that support of his mother. How little we, as teachers, know what deep wounds our sarcasm makes.

As is the teacher so is the classroom. There are teachers who seem never to catch up with their work. Their desks are a hodgepodge. Their rooms are chaotic. They seem to be trying to do a great deal and are always pressed for time. They are always behind, and the work of their pupils is in a similar condition. The general atmosphere tends to hinder accomplishment. Can a bright child be blamed for failing to function well under these circumstances? Is it likely that his abilities will be discovered? Then there is the mechanically precise teacher who does all that is required (but no more), who lives up to all rules exactly, but who in her obedience to law kills all incentive. She is efficiency personified, but she has little influence upon the lives of her pupils.

The teacher who counts and the one who brings children to a realization of their abilities is the one who makes them work hard but well, who leaves something of herself with them, and whose very being is an inspiration to them. Such a teacher is exacting. She gets things done on time; she runs a busy workshop where pupils enjoy doing the work that is at hand. Such a teacher is not too busy to become acquainted with the home life of her pupils, to inquire into their extracurricular activities, and to learn of their trials and their ambitions. She finds time to encourage those who need it, to redirect the activities of those who are headed in the wrong direction, to inspire the wavering with definite life aims and interests. By giving of herself more than the course and school rules require she becomes a factor in the lives of all her pupils and helps to bring to the surface their latent abilities.

The real test of a teacher is not the number of pupils that she has failed nor the number of pupils she has put through, but rather the number of pupils whom she has understood. So the quality of teaching is a deciding factor in determining bright children. The good teacher will play upon the responsive chords of her children in such a manner that, somehow in many of them, she will strike the overtones that, when added to the dominant ones, will bring out the richness and fullness of youthful personalities.

William —— was a big, overgrown, over-aged boy who was classed as a slow pupil. He seemed never to do well in his work and was hoping to relieve his embarrassment by quitting school. Finally, however, he was assigned to a teacher who understood him. He learned to like school; he became a dependable boy and a leader of his class. When he left he had the ambition to be an engineer, which means that he had an incentive for work and an ideal to accomplish. Life was worth while.

Such a teacher may remain in the same school for a quarter of a century, yet be up to date in theory and practice. Her hair may be turning gray, yet she is a benediction and a blessing to her pupils and associates. She may be getting old in the service, yet the years do not make her old in spirit. Such a teacher helps boys and girls find themselves; and where she has been in a community for any length of time, the men and women who were her pupils honor and respect her. She is their favorite teacher because she took an interest in them and tried to make something out of them. Such is the power of good teaching when the teacher's interest lies not in her pay check, not in the course of study, but in the lives of the boys and girls who sit in her classes. Good teaching is a most important factor in stimulating growth in youthful potentialities. It is not likely that anyone will overestimate its value.

THE TEACHER'S JUDGMENT AS A FACTOR IN SELECTING
BRIGHT PUPILS

Teacher judgment is another means of helping to discover the bright pupil. Such judgments, however, are not adequate as the sole basis of selection. Even the best teachers, with the welfare of their pupils uppermost in their minds, make mistakes; and unless one is careful, wrong judgments will prevail. A case of this sort occurred in connection with departmental teaching in one seventh and two eighth grades. There were three teachers. Each had a home classroom and each was responsible for the pupils in that room. Each taught in the morning in her own room all the subjects that were not departmentalized besides her departmentalized subject. English, arithmetic, geography, and history were departmentalized. English and arithmetic were given a full year in both grades. History was given a year in the eighth grade and a half year in the seventh. Geography was given a half year in the seventh. One teacher taught English and another arithmetic in the seventh and two eighth grades. The third taught geography the first half of the year and history the second half in the seventh grade and history a full year in the eighth grade. All these teachers were well trained, had broad experience, and were ranked as first-class teachers. Their judgments were usually based on facts gained from experience and observation, so that they were not arrived at hastily. But somehow they fell into a rut in giving marks. The English teacher gave the pupils in her home room better marks in English than she did those in the two other rooms. She failed more pupils in the other rooms. The history teacher gave her own pupils better marks than she gave to those in the other rooms to whom she taught history. She, like the English teacher, failed twice as many pupils in the other rooms as she did in her own room.

The arithmetic teacher did likewise. Not one was aware of the fact that each was favoring her own pupils. One day the standings given in the departmental work were placed on the blackboard in graphic form and called to their attention. For the first time were they aware of what they were doing. One could not accuse these people of being partial. They would not intentionally be so, but the facts in the case showed clearly that unconsciously each had favored the pupils in her own room.

Judgments may be determined by standards. Some teachers have high standards, some have low standards, and some have none. Some give many high marks, others give few. There seems to be no guiding standard. While most teachers are consistent in their own markings, few teachers will give the same piece of work the same standing. Dearborn¹ found that some instructors gave ten times as many A's as others and reported one-tenth as many failures. Elliot and Starch² found that experienced mathematics teachers gave marks ranging from 28 to 90 for the same piece of work. Hulten³ found that some teachers marked a paper as low as 20, while others marked the same paper as high as 84. Another paper received scores ranging from 55 to 90. Again, Hulten found that the same teacher rated the same paper 90 one day and 78 another day. Furthermore, a teacher of twenty-four years' experience marked a paper 85 on one day and marked the same paper 65 a month later.

The above illustrations do not prove that teachers' judgments are of no value. Neither do they prove that some are consistently good and some consistently poor. But they do

¹ National Society for the Study of Education: *Twenty-first Yearbook*, Part I, p. 2.

² *Ibid.*

³ Hulten, C. E., Superintendent of Schools, Marinette, Wisconsin: unpublished study in grading of compositions.

indicate that we have no definite guiding standards for grading, that we all err, and that before we arrive at a conclusion we should make sure that we have not been inconsistent, and that our judgments are fair.

In using teacher judgment as a guide or a factor in choosing bright pupils it is well to obtain the opinion of more than one teacher. Their conclusion is less likely to be influenced by parental enthusiasm or by personal bias. If the departmental plan is used, the separate judgments of all the teachers should be sought as well as those of the supervisors and principal. The composite judgment of all will be much more accurate.

In selecting bright pupils, let us make sure that our conception of brightness is not too narrow. Let us try to benefit by the past and not be too hasty in relegating our pupils to the scrap heap of blockheads and morons. It behooves us to hold our judgment in abeyance when that judgment tends to have a negative result upon life. If equality of educational opportunity means anything, it means that each should have the type of education for which he is best fitted by nature. This means that the child who stands well in standard tests, who does well in his class work, who is rated well by the judgment of the majority of his teachers, and who has well developed interests is the child who deserves a special curriculum enriched along the lines of his interest.

SUMMARY

Selecting the gifted, talented, or superior pupils is a difficult task. There is little in the way of guidance, but the need for guidance is pressing. Most talent or giftedness will not come out by itself. It must be brought out. We have repeated in this chapter that there are different types of intelligence: verbal, mechanical, social, and aesthetic. The verbal type has received most, if not all, of the school's attention. The other

types are just as valuable and should be given their just due. Interest is a sign of intelligence. It should be encouraged. Class standings are a good indication of brightness. In the past, standings were almost the only criterion. Many successful people failed in school, not because of inability, but because they refused to do the work. Hasty conclusions that have a negative result on the pupil should be avoided. Possibly a pupil failure is a school failure. Standard tests help to reveal the exceptional pupil. These have their faults; nevertheless, they are a decided help. They cover the field of verbal intelligence and have commenced to cover the field of mechanical and aesthetic intelligence. It is hoped that the future will bring more tests to aid in this work. The teacher and her method are important factors in finding the bright, talented, or gifted. She creates the atmosphere which makes talent show itself. However, teacher judgment must be carefully checked so that erroneous conclusions may be guarded against.

CHAPTER VII

CAPITALIZING THE INTERESTS OF GIFTED PUPILS

THE atmosphere created by the teacher's attitude toward her pupils is an important element in discovering interest and calling forth aptitude. Children, like plants, grow, blossom, and flourish under favorable conditions. Under adverse circumstances they are dwarfed and stunted. If a child is so unfortunate as to have a series of teachers who cannot appeal to him, his abilities are likely not to be called forth, because his inborn capacities do not show themselves until aroused by the proper stimulus. If the stimulus is delayed until the period of youth is passed, the inborn capacities may not respond, for their vitality and life are likely to be gone.

The stimulus is not always found in the classroom procedure. It may be found in the personal interest that the teacher takes in the pupils. For example, one of the authors knew a boy who disliked school very much. He attended only because of the insistence of his parents and the persuasion of his friends. He did barely enough work to get passing grades. This was at the time when manual training and domestic science were not so generally a part of the course of study as they now are. One of his teachers thought that she saw in the boy something that was worth while. She induced him to go to a school where he could study manual training. Almost immediately it seemed that he had found what he wanted, for he was happy and delighted with his work. He completed his course and from the very beginning was con-

sidered a success. To-day he is holding an important position. If it had not been for the personal interest of this teacher, it is very likely that he never would have found himself.

Another boy was considered indolent and lazy in school. He repeated the first grade under a teacher who was a strict matter-of-fact person, cold and austere with her children, and seldom inclined to give them words of encouragement or praise. She was reputed to be a good teacher, but her attitude blighted childish ambitions. In direct contrast to her was another teacher in that building, who played the part of a little mother and who so wove herself into the lives of her pupils that her commands came in the form of requests, which were gladly obeyed. Under the radiant warmth of her personality the indolent and lazy boy blossomed forth to a position of leadership in his class. Work became a joy to him.

In direct contrast to the motherly teacher was a man who believed in the old maxim, "Spare the rod and spoil the child." He knew how to teach fractions, in fact all kinds of subject matter, for he was a master in its manipulation, but his knowledge of boy life, boyish impulse, boyish ideas seemed to be so slight that, if a boy did anything that was not strictly according to classroom rules, he was immediately punished. This man may have been a good teacher of subject matter, but as a teacher of boys he was a failure. His efforts have left a trail of dislikes and hatreds that cannot be erased so long as memory lasts. Surely in an atmosphere of this kind many bright pupils are lost. Such an atmosphere drives from school many pupils who have native ability that slumbers on because there is nothing to awaken it.

EXTRACURRICULAR ACTIVITIES — A KEY TO INTEREST

A boy who graduated from college at the foot of his class had the hobby of collecting plant specimens. In time his knowl-

edge of plants secured for him a position with a big museum at a large salary. This boy's classroom accomplishment was not a mark of his intelligence or mental gifts. If he were to be judged by his classroom accomplishments, he would be rated as a failure. But the classroom did not appeal to him. It did not arouse his dormant possibilities. This is a splendid illustration of how our schools fail to adapt their work so as to develop the native endowment of each individual. Through his hobby this boy found himself.

Two boys in the L — School became interested in wireless when they were far down in the grades. Frequently they were invited to bring their apparatus to school to give demonstrations and talks to the class. Not infrequently their teachers visited their rooms at home, which were workshops, and there heard concerts, listened interestedly to discussions on new ideas, or were introduced to the mysteries of the mechanism of radio. The encouragement of this extracurricular work kept these boys interested, so that their spare time was profitably employed. This carried on through high school, and upon graduation both boys were placed at the head of the radio departments in two of the leading firms of their home city.

Another boy of much mental ability was inclined to be a hoodlum. He had become lazy and was falling into bad habits of thought. Being at the adolescent stage in life, he was likely to go far into depravity if once started. Somehow he became interested in singing. Upon being transferred from one building to another he asked if he had to be in the boys' chorus. When told that he must, he grumbled, but a month or so later when the seventh- and eighth-grade pupils were asked to signify the thing that each was most interested in he mentioned singing and said that he wanted to be a concert singer. Five or six months later he was asked if he still wanted to be a

concert singer. He still did, whereupon he was told he should know how to play a piano, so that he could practice singing. "We have no piano at home," he said. "Can your parents afford to give you lessons and are they willing to pay for them?" asked his teacher. "Yes." "Will you practice faithfully if we let you use the school piano?" "Yes." And he did so to the close of the year. His principal passed him on the street during the summer vacation and the boy asked, "Are we going to have the boys' chorus again this year and is Mr. —— going to lead it?" When told that we were to have boys' chorus work and that Mr. —— was to lead the chorus, he expressed his boyish enthusiasm and feeling by giving vent to the one word that indicates how a boy sometimes feels — "Bully."

When our senior high school gave *Pinafore* it was discovered that a young bashful boy could sing. He was given an important part. It changed his attitude, stimulated his self-confidence, and made him a stronger boy.

Such are the possibilities of arousing interest when a capable teacher is on the job. Further suggestions of this sort will be given in the next chapter. The purpose here has been to emphasize the point that the stimulation of pupil interest is the teacher's task. The compulsory attendance laws insure the physical presence of the pupil at the school. The teacher must insure his mental presence by making a strong appeal to his active interests. A child's character, knowledge, and skill are not reconstructed by sitting in a room where events happen. Events must happen to *him* in a way to bring a full and interested response. The whole policy of compulsory attendance stands or falls with our ability to make school life a series of interesting and absorbing experiences to the child. It is impossible to compel education. It is possible to have compulsory physical attendance at school, but education is

had only when attention to and participation in school activities invite it. It is the teacher's duty to select these activities with reference to the child's interests, powers, and capacities. There is no other way in which she can guarantee the mental as well as the physical presence of the child. "The evil of the elimination of pupils cannot be solved simply by raising the compulsory school age; or that of retardation by promoting a given percentage of pupils regardless of standards of grading; or that of half-hearted work by increasing the emphasis upon authority, uniformity, coercion, drill, and examination."¹ The best solution is a high quality of teaching; teaching which interests children because it gives purpose and spirit to the educative process.

MOST CHILDREN HAVE INTERESTS

In the remaining part of this chapter several specific devices will be considered by which the interests of children may be discovered and used to advantage. Children have interests during all ages. Proof of this can be readily found by asking those with whom you are acquainted about the things they like to do best. Almost every child will give a response. The age of the child frequently determines what that interest is. The season of the year influences it much also. In spring and summer baseball predominates with the boys; in the fall Rugby and soccer football. During the winter season basket ball and in the early spring marbles are prominent. All of these, of course, are seasonal interests but they illustrate the point that most boys have a definite idea regarding what they want to do. Girls' interests are somewhat similar although they do not always select those that boys do. Girls are often interested not as participants, but as spectators.

¹ Dewey, John: *Interest and Effort in Education*, pp. viii, x, Houghton Mifflin Company, 1913.

Interests may be divided into two classes: (1) those that are contagious, aroused because someone else "is doing it," and (2) those that are continuous and peculiar, prompted by an inward urge of the individual child. The former type gives us our seasonal sports, styles, fads, and the like. These interests are group or community activities that are not fundamental to the development of the individual. The latter type is more likely to be an individual interest aroused by an inward urge toward a given field of activity.

The individual interest may not be self-assertive. It may lie underneath the surface as a mere potentiality and may require a stimulus to bring it up into active operation. An interest may be abiding or it may be ephemeral, but in either case it is a part of that endowment that is intended to aid in the development and growth of the child's personality. By its accomplishment can be put upon a plane considerably above the average production of the individual. One will work harder, longer, more willingly, and more cheerfully at a task in which he is interested than he will otherwise. It is during such periods as these that one "tests his wings," so to speak. Interests also supply a quality of product that may not be otherwise found. When once a child has put himself upon a higher plane of mental activity and has felt the satisfaction and exhilaration that come from the discovery of his own power, that child has unconsciously set a standard for himself. He never again will be satisfied with a piece of work that he knows does not compare favorably with the product of his best self. The original nature of each individual somehow seems to contain interest possibilities that can be used as educative forces. To use them in our educational process is to harness original nature and have it work for us.

But harnessing interests is like harnessing any other natural tendency. It requires much study, patience, and effort.

Before interests can be harnessed they must be found or aroused. Finding the interests of children as a means of getting them to read good material and to direct their efforts along certain lines is an educational problem. It is the writers' belief that, if one can establish an interest in a particular subject, the person interested will be glad to read stories and study factual material pertaining to that interest.

HOW TO FIND ABIDING INTERESTS

The discovery of abiding interests entails some time and difficulty. There are several methods that may be used.

The Report Method. One way to uncover abiding interests is to require the pupils to respond to certain key questions. For example, this topic was given to 150 seventh- and eighth-grade boys and girls, who were told to use thirty minutes in which to write on it: "What I would do with \$10,000 if I could do with it just as I pleased." The answers illustrated clearly the influence that the school had upon the thoughts of its children. We had in our school a system of banking whereby the children were urged to deposit at least a penny every week. The necessity for the habit of thrift as an important factor in successful living had been stressed all the way through the grades. The necessity of budgeting one's income and of investing sanely one's savings had also been stressed, so that one of the natural reactions to this question was for the children to give us back on the papers what had been taught them through their banking. The first reaction of almost every child was to put some part of that \$10,000 in the bank, and a good many spoke of investing a part of it in safe securities. This was an expected reaction because of the arithmetic work. What was wanted, however, was a list of the interests that had come to them naturally or through the efforts of the classroom. Significant things were found. There

was much to prove that boys and girls in the seventh and eighth grades have some definite ideas as to what they want to do for their life's work and some notions as to what they would like to do if they had adequate funds.

One girl said, "I would go to the university and study to be a nurse or a music teacher." One boy said, "I would buy a forest preserve." Another said, "I would buy some land and plant trees on it," and went on to develop a plan of what he would do with his land and the trees. Four girls desired to be teachers. Four boys wanted to play musical instruments. One girl wanted to be a dancer, and a great number of the pupils looked forward to business careers. Most of them had a fair idea of what they might do with that \$10,000. Many expressed a desire to travel and most of them set a certain amount to be spent in this way.

The following question was also asked: "What would you do if you had two months in which you could do just as you pleased?" The reactions were similar to those listed under the first question. However, three pupils were found who had abiding interests. One said: "I am greatly interested in cartooning, although you would not think so by my drawing now. I expect to have my uncle teach me cartooning as he is a cartoonist himself." Another girl said, "One thing I would like to do very much would be to write a book myself for I have written stories and small books on scrap paper, but I would like to write a real book." Another girl said: "I am writing a story for a book. I have no reasons to write a book. It wouldn't be good enough to publish but I like to write and read. They are my favorite sports." Four girls expressed a desire to be nurses. Some boys were interested in mechanics, such as electrical engineering, motors, aëronautics, and the like.

Another means of finding the interest of children is to have them write on the topic "My hobby" or "What I would like

to have as my hobby." It is refreshing to find that almost every child has a hobby or something in which he or she is particularly interested and upon which much time is spent. This question also was given to the pupils of the grades previously mentioned. They were allowed thirty minutes in which to write. The results were very interesting, for the hobbies ran the whole scale of human activities. One boy was interested in the grocery business and is now working as a clerk in a store. He plans to work to the top. Another boy was interested in selling papers and was actually selling them, not to make money but for the business training he received and the training in how to approach people. He said: "When you address a man you should say, 'Paper, sir?' The man will be more likely to buy a paper than if you go and say, 'Paper, hey,' or any other slang." Again other children were interested in building things. One boy guided by the *Boy's World* made things at home. He had already made a toy merry-go-round, toy automobiles, and Eskimo sleds. Another boy, with the help of two friends, had built a little factory in his basement, where he had made doll beds, cedar chests, chairs, tables, lamps, sleds, and carts. A number of these finished articles were sold. The boys called their factory the M. & M. Toy Manufacturing Company. Some of the pupils liked to fish, hunt, or roam around in the woods. Others liked to trap and study animal life and still others liked to watch the processes of nature, such as the growth of trees and butterflies.

Another group liked dancing, not ballroom dancing but aesthetic dancing, which requires much physical training and practice. Some even had ambitions for a stage career. One girl said: "Every night after school, if I get home early enough, I go upstairs, get my slippers, start the victrola, and dance. I am trying to walk across the room on my toes. I can go halfway across. When I get older I plan to go on the stage.

Last summer some of us girls made costumes and danced on a large lawn." One group wanted to be teachers, from kindergarten teachers to teachers of singing or piano. One little girl said: "Teaching my sister is very good practice. I love to play school and be the teacher." Some of the boys were interested in gathering stamps. One boy said, "It (gathering stamps) tends to make geography more interesting." When a boy finds the stamp of a certain country he tries to learn something about the government, people, and size of that country.

Radio, of course, was popular because it is so extensively used. Most of the boys who were interested in radio wanted to build radio sets of their own, starting with simple ones and rebuilding them until good sets had been made. Radio was a splendid hobby because a radio in the home tends to keep the boy there, and while interested in it he is wholesomely occupied. A number of girls were interested in sewing. Some of them even went so far as to help make clothes for the children and grown-ups at home. Others were doing crocheting, fancy needlework, and art work. This all tended to make the homes more attractive and was splendid for the girls.

Dramatics and writing showed as strong preferences on the part of some. One girl said, "As soon as I complete high school I am going to join the Ziegfeld Follies." Another one said, "My hobby is to make up plays." She then went on to say that the previous summer she had made up five plays, which her friends acted. They charged five cents' admission to four of them. The money went towards the costumes they had made. The house was completely sold out for each performance. Next summer this young playwright plans to give a play in a neighboring city in her uncle's theater. She has the play written and ready to be acted. Its name is *Little Goody Two Shoes*. Here we have a distinct case of a hobby that may

lead to something worth while if the child's efforts and interest in writing are fed and directed in an intelligent way.

Another girl said: "When I have spare time I write stories and often make up poems. When I grow older I want to write books. I wrote a very small play with only eight chapters which I named *Maud of Magic Farm*. Lately I wrote a book which I called *A Weary Traveler*. When I was young I always wanted to be like Louisa M. Alcott." Here again is a distinct tendency toward literary effort and if cultivated it might produce splendid fruit. Nursing and caring for children attracts some girls. Others like to read, with no particular idea in mind except that of reading good books.

These papers brought to light the fact that a number of our pupils were interested in singing and instrumental music. A boy who was more or less a problem in school said: "When I am through with my work I like to practice on my violin. When I am tired I like to practice; it seems to take the tiredness away." Of course, athletics and sports of all kinds were the first choice of a great many. One young fellow was raising guinea pigs and in his paper he told how he made money with them. A number of the boys were interested in mechanics of different types.

The pupils who had abiding interests were by no means in the majority among the one hundred and fifty who were tested. The results were worth while. Some of the pupils had acquired abiding interests without guidance. With an enriched curriculum the number of abiding interests would have been much larger. Furthermore, it must be remembered that in studies of this kind premium is to be put upon quality rather than quantity. The work would have been exceedingly well worth while if we had discovered only one pupil with an abiding interest.

The Free Association Method. Another means of discovering the interests of children is to use a certain amount of time, say thirty minutes, in which they are to write the different words of which they can think. Somewhere in the lists that are written one often finds a series of words pertaining to some particular activity. If a boy is especially interested in sports, he may write a number of words peculiar to certain games or, if interested in automobiles, a list of words pertaining to automobiles.

This method worked particularly well with one boy. He had seemed to have no interest in anything. His teacher had said, "If there ever was a hopeless case, he is one." The boy was listless and intolerably bored with the formal work of the school, which to him seemed dry and useless. When he was asked to write all the words that he could think of he reacted in a normal manner. First he wrote the names of all the things that he could see from where he sat writing. Then, without any hesitation, he quit looking around, began to write steadily, and continued thus until time was called. An examination of his list showed that all the words in the latter part of it referred to farm activities. When he was questioned on the subject it was discovered that the boy's whole ambition in life was to become a farmer.

Acting upon this information, the teacher changed the content of the boy's instruction in a radical manner. In his reading he made his grades because he was given material that related to the farm and farm activities. His arithmetic problems were thereafter restricted for a while to the quantitative side of farm life. Every effort was made to present to him subject matter from the farm point of view. The results were very gratifying. The boy's listlessness disappeared. He became interested in his work and took a constructive part in it. Best of all, the contagion of his interest carried

him into other fields and before long he was doing the regular work of the school in a creditable manner.

The Inventory Method. Again, to find the range of interests in the school a questionnaire may be prepared listing a number of life activities. This questionnaire may be submitted to the pupils with instructions for them to make a first, second, and third choice. A complete description of this is found in Chapter VIII.

Other Methods of Finding Interests. It is quite possible that no one of the methods that has been outlined thus far will prove feasible in some school systems. Possibly there are some teachers who are too busy to carry on more than the minimum amount of investigation of this sort. For such conditions the suggestions that follow may prove helpful.

1. Provide as far as possible for a free selection of topics for themes in English. Keep a record of these topics for each pupil and watch for any groupings or trends that may occur in them.

2. Assign as theme topics in English such subjects as :

What I should like to do when I get through school

What I like to do best during vacation time

My favorite amusement

Where I like to go best and why

Where I should prefer to live if I could not live in the
United States, with reasons

The most interesting time I ever had

3. Look up any records that your pupils may have in the Stenquist Mechanical Aptitude Test or the Seashore Music Test.

SUMMARY

Interest is related to the education of the gifted. Children have interests. They are nature's means of stimulating

growth. They are great natural forces which the school can harness to facilitate the educational process. We may compel children to attend school. We cannot compel mental growth unless interest is aroused. Daydreaming is not necessarily a sign of indolence. Many of our present-day conveniences were seen first in daydreams. Daydreams are connected with interests. Before a child is condemned for daydreaming be sure that the dreaming is not worth while. Daydreaming helps creative thinking. Our courses of study tend to prevent the harnessing of interests. So the minds of children continue to wander to their places of liking. One of our problems is to provide environment that induces educative or developing activities. The teacher's attitude has much to do with creating the right environment. Interests grow when the teacher encourages them, whether they are inside or outside the classroom. The school should attempt to find the interests of children.

CHAPTER VIII

THE EDUCATION OF THE GIFTED — ORGANIZATION AND ADMINISTRATION

THE previous chapters have been general in their nature. The needs and characteristics of gifted pupils have been indicated, the general nature of curriculum content that is adapted to their needs has been outlined, the methods and procedures that are useful in the education of the gifted have been pointed out; the need for subject matter that is in line with the interests of gifted pupils has been emphasized, and means of identifying these interests have been suggested. This chapter will be concerned with a description of one method of organizing and administering education in line with the principles that have been described in the earlier chapters. The plan to be described is one that was used in one of the school districts in the city of Appleton, Wisconsin, from 1921 to 1925. Since 1925 the plan has been greatly developed and broadened. It is now in use throughout the whole city. This account must be restricted to the early stages of the work only.

The plan, which represents a modification of the project method of instruction, was called the "hobby" method. The aim was to provide a project that was a genuine, conscious, purposeful activity for each pupil who was entitled to do extra work. The regular work was never neglected. Indeed, it always received first consideration, because it had to be completed satisfactorily before the project or hobby

work began. Each pupil knew that he would be allowed to work at his hobby as soon as the preliminary requirements were met. This was a powerful urge to many pupils, who would not have met the regular requirements otherwise. Remedial instruction was planned to assist backward pupils in meeting the preliminary requirements so that they, too, might spend at least some time at their hobbies.

At the beginning of school each year, the number of pupils who could already meet the preliminary requirements was determined. This was decided originally by using a battery of standard tests. After the first time only the reading test was used. Every pupil who was up to standard in the test and up to passing grade in all his subjects was eligible to work at his hobby. Those who were below standard were required to do remedial work along with the regular work of the class. As soon as they brought their achievement up to the median for their grade, they were permitted to start work on a hobby. On the other hand, if some pupil who had started at a hobby began to fall below the median level of achievement, he was required to quit working at his hobby until his deficiency had been removed.

REPORT METHOD

When the pupils who were eligible to do hobby work had been identified by their test scores and class standings, the next step was in order. It consisted in helping each pupil to find his own particular hobby. In the first year of the work, this was done by means of the report method. All the pupils were asked to write answers to the following questions, which were adapted from Kelley's *Educational Guidance*:

1. What indoor game do you like best? ¹

¹ These questions yield interesting and worth-while returns in every school. A summary of returns from a wide area is to be found in *A Study of Children's*

2. What outdoor game do you like best?

3. What magazines have you read recently?

Put a cross in front of the name of the one you like best and tell why you like it.

4. What is your favorite book? Why?

5. What occupation would you like to follow after you are through school?

6. What person not in your local neighborhood would you want to be like if you could?

7. If you had plenty of money and were perfectly free to travel, what foreign country would you visit? Why?

8. If you had plenty of money to spend just as you wanted to spend it, name three things that you would buy for yourself.

9. If you had plenty of money and were free to go to any of the following, mark the one that you would attend:

(a) A football game

(j) A concert

(b) Church

(k) A baseball game

(c) A movie

(l) Grand opera

(d) A political convention

(m) A prize fight

(e) An art gallery

(n) Light opera

(f) A basket-ball game

(o) A social dance

(g) Sunday school

(p) A dramatic recital

(h) A debate

(q) A play at the theater

(i) A fashion show

(r) An exhibition of aesthetic dancing

10. If you had plenty of money and were perfectly free, how would you spend your summer vacation?

11. You will have five minutes to write all the words you can think of. Take care not to repeat any of them. Do not count or recite anything that you have memorized.

Interests, which is issued in mimeographed form by the Wisconsin State Department of Public Instruction, Madison, Wisconsin.

When the results were tabulated it was found that there were a number of seasonal interests represented, but a few definite centers of interest were evident that appeared to be of the abiding type. On the basis of these interests, the first year four clubs were organized relating to newspaper work, teaching, radio, and forestry. The next year interest was so general that four more clubs were added, salesmanship, nursing, arts and crafts, and mechanics, making eight in all. These continued until the end of the experiment.

INVENTORY METHOD

After the first year of the experiment a modified inventory method was used based upon the results of the preceding year or years. At the beginning of each year the following material was mimeographed and put into the hands of each pupil who was eligible to do hobby work.

INTEREST QUESTIONNAIRE

Name Grade Date
School

Read these sheets over carefully. They will tell you some important things relating to eleven kinds of study that the boys and girls of your school have enjoyed in past years. After you have read the sheets through answer these questions about them.

Are you interested in any of the following? Are you interested enough to want to study it? Check *three* interests in the order of your preference, writing the word *First* to the left of your first choice, *Second* to the left of your second choice, *Third* to the left of your third choice.

You are asked to make three choices because we are not sure that we can have all the clubs mentioned below, but we shall have as many as possible.

The Salesmanship Club

- I. Purpose
 - A. To find out what salesmanship is
 - B. To learn essentials of business. A successful business is founded upon the two following ideas :
 - 1. Seeing the need of a certain kind of service in a community
 - 2. Intelligently filling that need
(The reasons why so many business institutions fail is because their founders have not solved satisfactorily both of these problems.)
 - C. To know essential characteristics of a salesman
 - 1. He must know his goods.
 - 2. He must believe in his goods.
 - 3. He must believe in the service rendered by these goods.
 - 4. He must have a suitable personality.
 - (a) He must be good-natured.
 - (b) He must be self-controlled.
 - (c) He must talk freely and fluently.
 - (d) He must understand people and anticipate their wants.
 - (e) He must sell goods for the service they perform and thereby build up a clientele.
 - (f) He must be able to talk something besides shop.
- II. Aim
 - A. To create interest in business and salesmanship
 - B. To begin acquiring essentials of business and salesmanship
 - C. To gain actual experience in selling goods
- III. Method
 - A. Trips to factories and mills so that one may gain some knowledge of how goods are manufactured
 - B. Talks on salesmanship given by salesmen
 - C. Dramatizing a conversation between a salesman and a customer
 - D. Holding sales

- E. Cultivating cheerfulness, willingness, promptness, accuracy, fairness, and honesty
- F. Reading books on salesmanship
- G. Reading other books, magazines, and newspapers so that one may be prepared to talk something other than shop

The Teachers' Club

The Teachers' Club was one of the largest of the interest groups last year. The coöperation was splendid and the girls displayed keen interest and enthusiasm that lasted throughout the year.

The following aims, purpose, and methods were used last year in our club.

- I. Purpose
 - A. To assist those who are desirous of becoming teachers
- II. Aim
 - A. To form the highest ideals necessary for a first-class teacher
 - B. To stimulate a desire to become a teacher
 - C. To create a keen interest in the best kind of teaching
- III. Method
 - A. To profit by actual experience. (Some of the girls taught in one of the grades for several weeks last year.)
 - B. To read not only good books, but the best books that can be obtained to help us in our aims
 - C. To visit the different grades for observation, with visits also to rural schools, the County Training School, and the State Normal School

The Radio Club

- I. Purpose
 - A. To give the pupils an opportunity to read an abundance of material relating to radio
 - B. To afford as much information about radio from as many different sources as possible

II. Method

- A. Reading books and newspapers and magazine articles
- B. Making experiments
- C. Question-box discussions
- D. Talks by local radio men

III. Subject material

- A. Brief history of the development of radio
- B. Radio as a public service
- C. The future of radio
- D. The principal parts of the radio
 - 1. Antennae
 - 2. Receiving apparatus
 - 3. Sending apparatus
 - 4. Tubes
 - 5. Amplifiers
- E. Bridging the gap between the sender and the receiver
 - 1. Broadcasting
 - 2. Brief study of radio waves
 - 3. International Morse code
- F. A comparative study of programs sent out by various stations

The Mechanics' Club

I. Tin can toys

- A. Purpose
 - 1. To learn the fundamentals of sheet metal work
 - 2. To broaden our knowledge of materials
- B. Aim
 - 1. To encourage boys to put their spare time into something useful
 - 2. To stimulate originality and inventive ability
- C. Method
 - 1. Studying metals used
 - 2. Learning the principles underlying metal work

3. Practice in cutting sheet metal
4. Learning
 - (a) Joints used in the work
 - (b) The use of soldering instruments
 - (c) Cleansing acids and their uses
5. Designing and building original toys

II. Elementary electricity

A. Purpose

1. To give the members of the club the elementary facts concerning electricity

B. Aim

1. To encourage boys who are interested in electricity

C. Method

1. Studying magnetism
2. Studying static electricity
3. Studying batteries, wet and dry
4. Studying the principles of the dynamo and motor
5. Studying current detectors, transformers, simple motors, and the like. Visiting neighboring plants

III. Woodwork

A. Purpose

1. To broaden one's knowledge of woodwork so that one may pursue the work further

B. Aim

1. To instill a desire to follow woodwork in those who like it
2. To show possibilities in the manufacture of wood products

C. Method

1. Visits to woodwork factories and mills
2. Designing in wood for (a) strength and (b) beauty
3. Study of wood to learn the kinds used for different purposes
4. Building original projects

IV. Elementary mechanics

A. Purpose

1. To fulfill the desire of boys who like to work with machines

B. Aim

1. To stimulate originality and self-expression

C. Method

1. Studying a few mechanical laws relating to levers, gears, and mechanical efficiency
2. Studying friction and the losses that result from it
3. Repairing clocks, phonographs, motors, and the like

The Writing and Dramatics Club

I. Purpose

- A. To give an opportunity for expression in writing or in acting

II. Aim

- A. Through activities to stimulate writing and dramatics

III. Method

- A. Studying persons who have made good in expressing themselves through writing or acting
- B. Studying good stories
- C. Studying good plays
- D. Opportunity for expression through writing or acting

The Forestry Club

I. Purpose

- A. To get a clear idea of our dependence on the forests and how they influence our prosperity
- B. To understand why a reforestation policy is necessary

II. Aim

- A. To feel an interest in forestry
- B. To understand different reforestation policies
- C. To learn the work and training of a forester

III. Method

- A. Learning the effects of the forest on early history
- B. Discovering why lumber costs so much now
 - 1. Learning what part of one's life it takes to save enough to build a home
- C. Investigating the effects of the forests on local prosperity
- D. Finding out how long our forests will last at the present rate of consumption
- E. Considering the need of a reforestation policy
- F. Learning the possibilities in forestry as a life work
- G. Studying training necessary for a forester
- H. Making trips to observe reforestation or a forest products laboratory
- I. Reading interesting books on forestry

The Nurses' Club

I. Purpose

- A. To interest girls in nursing as a profession
- B. To show the value of a nursing course to every girl
- C. To show that nursing is not a new profession

II. Aim

- A. To give some general information about nursing
 - 1. A short résumé of the history of nursing
 - 2. Service required of nurses
 - 3. Requisites for one caring for the sick
- B. To show the responsibility that one has who cares for the sick and prevents spread of diseases
- C. To learn possibilities in nursing

III. Method

- A. Practical demonstration
 - 1. Bed making
 - (a) With the patient
 - (b) Without the patient

- (c) Discussions relating to
 - (1) Beds
 - (2) Mattresses
 - (3) Airing beds and clothing
- 2. Giving a bed bath
- 3. Proper characteristics of a sick room
 - (a) Paper on wall
 - (b) Exposure
 - (c) Ventilation
 - (d) Location
 - (e) Furniture
 - (f) Choice of the room
- 4. Common emergencies and treatment
- 5. Care of the sick
- B. Reading good histories, biographies, and stories
- C. Visiting places of interest
- D. Questions and answers

The Arts and Crafts Club

- I. Purpose
 - A. To help those pupils who have a talent and a strong feeling for art and who wish to know more about art
- II. Aim
 - A. To train the aesthetic sense of the individual
 - B. To bring out freedom of expression
 - C. To open the minds of the students to the fact that they should be themselves and that they should draw their inspiration from nature and from the immediate needs of their surroundings
- III. Method
 - A. Studying good books relating to arts and crafts, such as books on
 - 1. Ribbon art
 - 2. Needlework art

3. Arts and crafts
4. Waxwork
5. Basketry and the like
- B. Visiting art stores and art departments
- C. Practical work in creating designs through
 1. Block printing and stenciling
 - (a) Designing
 - (b) Carving
 - (c) Transferring patterns
 2. Waxwork
 - (a) Modeling in wax from the crude state to something having form, design, and beauty, such as neck cords, bracelets, vases, etc.
 3. Basketry or paper rope weaving
 - (a) Working from a mental image at making baskets, lamp shades, and vases
 4. Crocheting and embroidering
 - (a) Studying good and bad trimming for garments and the proper use for crocheting and embroidery as a form of trimming
 5. Ribbon art
 - (a) Making ribbon novelties for decoration
 6. Enameling
 - (a) Making something attractive and beautiful from very inexpensive materials, such as vases, bottles, shoe trees, etc.

In this course odds and ends from mother's "trunk of wonders" may be used and made into something useful and beautiful.

The Newspaper Club

I. Purpose

- A. To give those pupils having natural journalistic ability an opportunity to develop their talent
- B. To enlarge their vocabulary
- C. To improve their use of English

II. Aim

- A. To make pupils wide-awake, observing, and alert
- B. To acquaint pupils, in youth, with the making of a newspaper
- C. To teach the divisions of a newspaper so that the pupils may know what belongs on the sport page, on the social page, in the personal columns, etc.
- D. To acquaint pupils with the kinds of news and newspapers that they may discriminate between the right kind of copy and the so-called "yellow" or sensational copy

III. Method

- A. Observing everything that occurs in school, not only in one's own room, but in whole building or district
- B. Selecting those happenings that are of enough importance to be considered "copy"
- C. Getting news of the town that has a bearing upon school life
- D. Assigning one sheet to each member of club

The Folk Dancing Club

There is some possibility of organizing folk dancing clubs. They would deal with artistic dancing of different kinds.

The Museum Club

We may have a club for collecting stamps, moths, and the like.

If you are not interested in any of these clubs, please state what your interest is.

A copy of the above questionnaire was handed to each pupil and he was instructed to make three choices, indicating them as outlined in the introductory paragraph. To make sure that each child understood what the different clubs were, he was instructed to underline the titles of the various

clubs until all clubs had been pointed out. Time was then taken to explain the ground to be covered in each club. In salesmanship the pupils were told that one could not just go into any part of the city, put up a building, and start in business; that the reason a number of people fail is because they do just that thing. One ought to survey the prospective territory to see if there is a need or a possibility of creating a need for the type of goods which one wishes to sell. If the results of the survey are favorable, then the business should be attempted. Surveys of different communities should be taken until one finds a location which has all the earmarks of opportunity. After the location is established one should have an absolute belief that the goods he has to sell will serve the apparent need. When one has confidence in his goods he can conscientiously urge prospective patrons to purchase. Every sale means a real service which will tend to establish confidence.

Then the qualifications of a salesman were discussed. The salesman must know his goods, study them, know their weakness and their strength. He must know the place where they can serve best and have the courage to tell when they will serve and when they will not. It was made plain that the business man must be one of good nature, slow to anger. All people make mistakes, and the business man must be big enough to correct them and have self-control enough not to mind the anger of an irate customer, but to wait until that customer cools down and then explain the reason for the difficulty. The salesman must be a person who is broad-minded and one who knows something else besides shop talk. Then the aims and methods as indicated in the outline above were presented.

Each club outline was explained in like manner. The children were asked if they had any questions. They were

free to ask any they wanted. After they had made their choices it was impressed upon them that they must be up to the standard of the achievement tests before they were privileged to enter one of the clubs. It was also impressed upon them that, if they were not up to standard, they were to go into a remedial section under the direction of a teacher. However, the incentive was always held ahead. They had made the choice of the club to which they wished to belong. Anyone in the remedial group who brought himself up to standard and passed his achievement test successfully was privileged to go into his chosen club.

After each pupil had checked the questionnaire indicating his first, second, and third choice of clubs, the questionnaires were collected. Each one made three choices so that he could be sure to find a club. It did not seem advisable to attempt a club where there were not at least five members. There were two reasons for this: first, we had a limited number of teachers to act as leaders and, second, it was very difficult to find and gather the materials with which to work. The questionnaires were sorted into piles; each pile represented those who chose a certain club. Then the names of those who chose a particular club were arranged in the order of their reading test scores, ranging from the highest to the lowest and according to grades and school. (The clubs included the seventh and eighth grades of two schools, which were about one-half a mile apart.)

The foregoing outlines and discussion are given in considerable detail with the hope that the procedure, or one similar to it, may be put into effect in other schools. The time required for the presentation of the outlines and the organization of the results is not excessive. The results that will be obtained in any school will make the study worthwhile even if nothing further is done. Teachers ordinarily

know entirely too little about the interests of their pupils. If the teacher has the time and inclination merely to read what her pupils' ambitions are, she will have possession of a fund of invaluable knowledge.

ORGANIZING RESULTS

It is also quite desirable and even essential for each teacher to know just which of her pupils need remedial work and which need enriched work. If only one test is used, that test should be in reading. This will be obvious to anyone who has reflected upon the extent to which reading is the key that unlocks everything else. On several occasions in the present study the pupils were ranked upon the basis of the Thorndike-McCall reading scores alone. We recommend this limited use of the achievement tests to any who have not time to carry out a more extensive testing program.

After the interest outlines had been returned by the pupils with all the questions answered, lists like the following were made and posted :

Interest Clubs

Arts and Crafts — Miss —

Reading Test Scores

		MEAN SCORE		
		(Required for entrance	T SCORE	
		into clubs)		
Eighth Grade, North, Lincoln				
Margaret	58.7	65		
Bernice	58.7	60		
Dorothy	58.7	60		
Viola	58.7	56		
Violet (3d)	58.7	52		

MEAN SCORE
(Required for entrance into clubs) T SCORE

Eighth Grade, South, Lincoln									
Irise	.	.	.	.	.	.	.	58.7	73
Seventh Grade, Lincoln									
Arline	.	.	.	.	.	.	.	54.8	60
Dorothy	.	.	.	.	.	.	.	54.8	56
Ida (3d)	.	.	.	.	.	.	.	54.8	58
Eighth Grade, Columbus									
Fanny (2d)	.	.	.	.	.	.	.	58.7	45
Seventh Grade, Columbus									
Jack	.	.	.	.	.	.	.	54.8	67
Paul	.	.	.	.	.	.	.	54.8	58
Esther	.	.	.	.	.	.	.	54.8	54
Remedial Group									
Eleanore	.	.	.	.	.	.	.	58.7	54
Viola	.	.	.	.	.	.	.	54.8	50
Lucille	.	.	.	.	.	.	.	54.8	50
Estelle	.	.	.	.	.	.	.	54.8	49
Margaret (3d)	.	.	.	.	.	.	.	58.7	52
Lucille (2d)	.	.	.	.	.	.	.	54.8	52
Gertrude (2d)	.	.	.	.	.	.	.	54.8	49
Helen (2d)	.	.	.	.	.	.	.	54.8	45

For complete tabulation see Appendix.

This list shows the names of those who were entitled to enter the Arts and Crafts Club and of those who would be entitled to enter the club as soon as they raised their scores in reading. The eighth grade standard is 58.7 and the seventh grade 54.8. Those below the grade standard were not eligible and had to improve their work. Twenty-one pupils wished membership in the Arts and Crafts Club but only thirteen were admitted at the beginning of the year. The eight others were placed in a remedial group, where they were given

remedial work in reading. Each stayed in this reading group until he could bring his reading score up to the standard for his grade. These pupils came from the seventh and eighth grades of two different schools. The leader of the club was one of the teachers and the meetings were held in the sewing room.

In the column headed "Mean Score" are listed the standard scores. The number in the middle column, after the name of each pupil, told what score on the reading test he had to equal or excel in order to get and keep membership in the club. In the column headed "T Score" each one found the score he made on the test. If a pupil was in the remedial group, he could see how much he lacked of being able to enter his chosen club by comparing his score with the standard for his grade, as shown in the middle column. Lists exactly similar to the one shown here were provided and posted for each club.

This method of sectioning was valid in most cases but a few exceptions were sometimes necessary. There were a few pupils in every school who could never hope to reach the standard score for their grade. These pupils belonged to that odd class of people who have the urge toward high achievement and can clearly see their desired goal but somehow lack the power to succeed. Exceptions were made also in a few cases where a pupil was highly but narrowly talented in some line such as music, which is largely independent of reading ability. This accounts for people whose scores were below the mean entering a club.

Before deciding finally to keep a pupil in the remedial group a conference with the teacher was held and the case of the child who had failed was discussed minutely. If a child had apparently done his best and was barely passing, it was assumed that owing to a lack of verbal intelligence he

would never be a great success. For that reason he was not deprived of the joy of being a member of his chosen club. But those who had ability and did not come up to standard were required to do the remedial work.

SOME RESULTS

This plan brought remarkable results, results that are hard to believe. The last year there were about fifty children in remedial groups. They were so anxious to get into the clubs that they worked like little Trojans to improve. Scarcely a day went by but one or more came to the office requesting a test. The result was that before the end of the year all but five or six had successfully passed the standard reading test. This was surprising. It hardly seemed possible. It is hard to believe that these children improved so rapidly. Nevertheless, the facts proved that they did successfully pass the reading tests. They were not given the same test twice. Each time they were tested a different one of the Thorndike-McCall tests was used, so that as far as tests were concerned there could be no question.

The fact that so many children could pass the required tests leads one to believe that, if more incentives were held out by way of something for the children to work toward, something which they would enjoy, much of the work in school that pupils now do merely because we ask them to, would be done better and more cheerfully. The same bit of philosophy works for adults. If one plans a fishing or hunting trip or a vacation, he is much more likely to get his work in shape. The hang-overs are cleared away so that nothing will stand in the way of enjoying that in which he is interested. The same principle seems to hold good in school. Perhaps we are only scratching the surface in our teaching. Perhaps there are possibilities in children of which we have not yet dreamed.

SOME DIFFICULTIES

The scheme that has just been described is very much worth while but it involves some difficulties. One of these is the fact that every year the first choice of some pupils must be ignored because there are not enough pupils to be organized into a club in that special thing. To meet this difficulty, as we have said, the children were asked to indicate their first, second, and third choices. When there was no club corresponding to their first choice they of course had to go into a club which corresponded to their second or third choice. This is a matter of regret. It is an obstacle that has not been overcome as yet. In the actual work, however, this obstacle caused little or no difficulty. Human interests are wonderful things. With a little encouragement even a minor interest grows amazingly. As a result there was soon no dissatisfaction over having to enter a club which was second or even third choice.

These tests lead one to believe that every child has an interest of some kind. During the five years the clubs were run there was just one boy who did not have an interest. However, this was soon cared for. Since he did not have an interest and was not interested in any club, he naturally went into a remedial group. He soon changed his mind. Boys and girls talked freely about various clubs and the things that they were doing. This set him thinking. He found that he was missing something. He could not stand being on the side lines; so he generated an interest in one of the clubs. Little difficulty was experienced in learning what each wanted to do. The difficulty was in making the range of clubs broad enough to care for all first choices.

There might be a question about excluding from the clubs those who were not up to standard in school work and those

who did not pass the reading test. Most of the pupils who failed in one or more subjects did so not from lack of ability. These pupils needed an urge to make them, of their own accord, work hard enough to pass their grades. When pupils had the privilege of being in clubs of their liking, they did not permit poor work to stand in their way. Interest furnished the urge. By demanding the price of admission most pupils worked hard enough to get into a club. If not at first, they did before the year was over. This materially improved the quality of school work.

Care in selecting clubs was urged. After the clubs were started pupils could not change from one to another. To do so would disrupt the organization. However, there were few requests for changes. Most of the boys and girls were happy with their choices.

CLUB LEADERSHIP

Much of the success of a club depends upon the leader. No one can lead a club of bright pupils by dogmatic methods. Constructive activity is the key to success in educating the gifted. The first thing that a leader must learn is to let the pupils alone as much as possible. The leadership must be with the pupils. They must do all the planning, deciding, and organizing that they can possibly do. The major function of the leader is to give advice *when asked*. The leader can offer suggestions but this must be done in a tactful manner. The leader is not a teacher in the ordinary sense of that word. She must not lecture or quiz. If she has the knack, a stimulating thought question once in a while may be in order. The main point to remember in club work is the fact that the members have undertaken to do something for themselves. This happens so rarely in school procedure that one must continually caution teachers who act as leaders for bright

pupils against arbitrary contradiction of ideas that the leader considers wrong. If some club member arrives at a wrong conclusion, the leader should ordinarily keep silent. The most that she must do is to suggest that possibly it would be wise to look into the other side of the question also. When that has been done the pupils must be free to decide even if they make a wrong decision. The function of a leader in clubs of these kinds is much like that of the adviser of a literary society. The leader must never forget that in clubs for bright pupils the show is theirs, not hers. Any attempts at dictation or dogmatism defeat the purpose of the whole scheme.

In this study the leaders, except one, were drawn from available teachers. It was not considered necessary that the leader be versed in the subject that the club was to study. If the leader was interested in the subject, she enjoyed digging out material with the pupils. Again, the leader did not need to be an upper-grade teacher to handle the situation effectively. One kindergarten assistant handled an eighth-grade remedial group and did splendidly. She used as a text a study reader that was well adapted for this work. Before long her group had so improved that most of the pupils successfully passed the reading test. A kindergarten director of many years' experience took another remedial group, with similar results. Another kindergarten director led the Teachers' Club. She enjoyed doing it and the girls enjoyed belonging to it. Another kindergarten teacher of one-half year's experience helped with the Salesmanship Club. She had been a clerk in a store for a few years and her experience there was an asset. With her worked a floor manager of one of the leading clothing stores. These people did unusual work. A music teacher, who liked to write, led one of the Newspaper Clubs and achieved good results. A mathematics teacher led the Radio Club. The school nurse led the

Nurses' Club; the manual training teacher, the Mechanics' Club, while one of the authors led the Forestry Club, and so on. None of us was expert in the subjects studied by the clubs, but each took an interest in the work, and the clubs functioned well.

THE CLUBS IN OPERATION

The places of meeting were chosen from necessity, not from adaptability. The Forestry Club crowded into the office. The Nurses' Club met in the Vocational School. A remedial group met in a kindergarten and sat on kindergarten chairs. The Mechanics' Club met in the manual training room. The meetings were held wherever a room could be found. Inconvenience did not seem to bother; the interest was too strong.

Before the clubs met, the leaders were called together and given the following list of instructions, to serve as a guide.

INSTRUCTIONS AND REPORTS

Club Instructions for 1925

1. Organize and outline work for the year.
2. Go to the public library and get books pertaining to your club.
3. Keep watch for magazine articles and advertising material that may be a help in your work. Keep lists of such material and of places where it may be obtained.
4. Make a list of the names and publishers, with their addresses, of materials that are found useful in your club.
5. Write to the State Library Commission for books.
6. Make weekly plans. Have a definite aim for each club meeting. Make your plans in duplicate. Send one copy to the office and keep the other. Do not make your club a duplicate of a

regular class ; keep it free, like an orderly business meeting. Leadership must come from within the club. Committees must take the responsibility of planning. Help your club to organize.

7. Each week plan to write the story of the material covered. The total of these ought to give a good idea of the content covered during the year. List the bibliography after each subject.

Outlines for the year were prepared and handed in. The librarian at the public library was asked to coöperate and she did so willingly. Magazine articles bearing on the club subjects were clipped and saved.

Weekly outlines were made on the following blank :

Weekly Report of _____ Club
Leader _____

Date _____

1. Plan for next week
2. To-day's aim
3. Method
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read and amount of reading done
 - (d) Report of what was done

The following are illustrations of how the blanks looked after they were filled in :

Weekly Report of Nurses' Club

Leader _____

Date Jan. 22

1. Plan for next week

Discussion of the sick room, covering the choice of room, ventilation, sunlight, furniture, care of the room, wall paper, etc. Reasons are to be given for each answer.
Short review of preceding lesson

2. To-day's aim
 - (a) Organization of the club
 - (b) Requisites of a nurse or for anyone who cares for the sick, with special attention given to personal hygiene
3. Method
Questions and answers
4. Report of work accomplished
 - (a) Good questions asked
In discussing personal hygiene the questions were asked:
"What is the cause of an offensive breath?" "What is the remedy?"
 - (b) Good contributions
Each girl gave at least one quality she would like her nurse to possess if she had to have one.
 - (c) Report of what was done
Betty was elected President.
Jean was elected Secretary and Treasurer.

We discovered there were only four girls in the club who did not have the desire to take training some day. There were five girls who were in the Nurses' Club the previous year. The leader tried to give the girls an idea of the subjects to be studied so that they might become more interested, and also that they might more easily and more intelligently contribute to the class, making suggestions as to ways the club might be improved. The leader also tried to show that the purpose of the entire course was fourfold: (1) to interest the girls in the profession, (2) to give them the opportunity to see the value of a course in nursing both as a prerequisite to the profession and as a very useful subject for every girl to know, (3) to give them a glimpse of the opportunities open in the nursing world — private, public health, and institutional nursing, and (4) to show how natural nursing is and that it is not a new profession. It was decided that the qualities liked in a nurse are similar to those we desire for ourselves.

A discussion on personal hygiene followed, with some helpful hints on care of hair, dress, face, hands, nails, teeth, and the body as a whole and the value of exercise, sleep, and food. Special stress was laid on remedies for perspiration and other bodily odors that might be disagreeable. A group of three was chosen by the President to take charge of the next meeting. The girls were given reading material on the subject, from which they were to formulate questions so that the rest of the class could take part. It was decided that a group of three, together with the President and leader, should be responsible for the programs at future meetings.

Weekly Report of Radio Club
Leader _____

Date Jan. 22

1. Plan for next week
 - (a) Norman S. will lead the discussion on the topic "The Growth and Development of Radio."
 - (b) Reports on reading and radio programs
 - (c) Classification of clippings
2. To-day's aim
 - (a) Organization, election of officers, and appointment of leaders
 - (b) General plan for work of year
 - (c) Specific plan for next week
3. Method
 - (a) The leader of the club acted as chairman until the club chairman was elected.
 - (b) The leader outlined the plan of work for year. General discussion followed.
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read and amount of reading done
 - (1) All members drew books from the club library.

- (d) Report of what was done
- (1) Notebooks, with a preliminary plan of work, were distributed to the club members.
 - (2) The contents were read and discussed.
 - (3) Leaders were assigned for all future meetings and their work was discussed.
 - (4) Reference courses were discussed.
 - (5) Plans were made for the construction of a radio library of clippings.
 - (6) Plans were made for reporting outside reading and radio programs.

Weekly Report of Salesmanship Club

Leaders _____

Date Feb. 5

1. Plan for next week

Continue discussion of service — different methods that can be used to give good service.

2. To-day's aim

To know how business can be built up through service ; to know different methods that can be used to give good service

3. Method

(a) Special reports on service by members of club

(b) General discussion by the class and Mr. H. (a local business man)

4. Report of work accomplished

(a) Good questions asked

(1) Why are floorwalkers necessary?

(2) What should be the character of a floorwalker?

(b) Good contributions

Suggestive selling was brought up by one of the members. Salesman should be willing to show goods even though an immediate purchase will not be made.

(c) Books read and amount of reading done

Romance of a Great Store

(d) Report of what was done

Service was the topic of discussion. Several special reports were given by some of the members. Each member was left with this question from the meeting before, "What different methods can be used to give good service?" Some of the methods suggested were: patience in selling, kindness, courtesy, attention, promptness, memory of faces and names, willingness to work, orderliness in keeping stock, knowing stock, directing customers to other departments, willingness to show goods whether customers are ready to buy or not, courtesy to both early and late customers, making customers comfortable while in stores, suggestive selling, and no disputing with a customer.

The clubs met once a week, every Thursday morning at eleven o'clock, and were dismissed at eleven forty-five, the regular dismissal time. Those who had to go from one school to another were dismissed early enough so as to be at the club meeting by eleven o'clock. Plans were so made that each club met in the school building nearest the homes of most of the club members.

The meetings were rather informal. They were not run on the order of the classroom. Each club had its organization, whose officers were responsible for the carrying out of the program. One day the club would listen to committee reports or to assignments. Another day might be given over to discussing a certain problem or planning a certain trip; another, to a trip around the city park to inspect the trees and to learn how many kinds grow there. Another day might be devoted to oral reading of a story or the silent reading of books. On still another occasion a trip was made to a lumber yard and a lumber mill. The aim was to have expression free and natural. The lines of discussion were determined by the interests of the club.

Another aim was to stimulate purposeful reading. During the club meetings interest was aroused and carried back to the classroom, where books pertaining to the interests were available. Libraries were assembled around these various interests so that there was plenty of good reading material at hand. When the child had any spare time he was allowed to read books that were of interest to him. During the club meetings problems were set, so that whenever a bright pupil was free from the classroom work he could work on his hobby. In this way he always had an opportunity to do something that he liked to do.

SUMMARY

The chapter developed in some detail two methods of finding interest: the report method adapted from Kelley's *Educational Guidance* and the inventory method. It showed how the pupils were organized into clubs and remedial groups. It told how interests were aroused through the clubs and how these in turn resulted in better school work. The pupils were rewarded with club membership for good work. This spurred the boys and girls on to harder effort. The success of the clubs depends much upon the leaders. They must use the boy and girl leaders in the clubs and have them direct their own activities. Responsibility develops judgment. The instructions given to leaders and the weekly reports were explained. Purposeful reading was one of our aims. To accomplish this interest, libraries were built.

CHAPTER IX

THE EDUCATION OF THE GIFTED — EXTRACURRICULAR PROGRAM

It is the purpose in this chapter to describe the work of the several clubs in a manner definite enough to make it possible for others to organize similar clubs, using the content of this chapter as a guide. Each of the clubs is described in turn.

The plan requires little clerical help. The club leaders make the outlines. These are duplicated or mimeographed. They serve as a questionnaire and help each student select a club. Tabulating the results of the reading test is not an extra task because many schools give some form of standard reading test each year for other purposes. These results may be used. The weekly report blanks are mimeographed. The weekly report is made out by the leaders with the help of the officers of the clubs. After the clubs are organized the weekly report is about the only clerical work necessary. That which is done in each club is cared for by the club officers.

The cost of the plan is not great. Reading material is the biggest item. However, this can be reduced to a minimum by using the United States, state, county, and city library service. School libraries and magazines offer much help. Frequently the pupils have reading material which they can contribute. A bibliography for each club is found in later chapters.

One might think that there would be difficulty in selling the hobby idea to teachers. This, however, is not the

case. Most teachers are what their training has made them. While our courses of study have not kept pace with social and industrial advancement, our teacher training institutions make their graduates feel the need for improvement. Almost all teachers are willing to try plans that have possibilities of true educational merit.

THE LEADER

When the inventory of interests is completed and the results tabulated and arranged, in the order of first choices, the number of clubs and their membership are known. It is now time to select the leaders. These may be chosen from two sources. The first source is the faculty. All teachers, from kindergarten through senior high school, are eligible. If they like boys and girls, if they are interested in their activities, if they understand the adolescent age and are willing to give their time, the necessary qualifications are satisfied. It is not necessary to know much, if anything, about the club subject. Boys and girls enjoy working on a level with adults. If the leaders are willing to help the members dig out material for the clubs, a long step toward success has been taken. The leaders in this experiment came from all grades. It was found that the grade a teacher teaches has little to do with her success as a leader. If she thought she could do it and had the "will" to attempt it, she invariably succeeded.

The second source of leadership is people, outside school, who have the qualifications just mentioned and who are willing to give their time. The superintendent of a large dry goods concern was very much interested in the project. Each year he furnished a leader for the Salesmanship Club, who proved to have some advantages over the teacher leader. First, the leader was selling dry goods every day. He was a student of salesmanship and so had much available material,

Second, he had the opportunity to apply his studies and thus had an abundance of rich experiences. Third, he worked out many practical applications of business principles. Fourth, he had a big institution to help him give a practical setting for his work. Whenever it seemed best, the club met at the store and obtained first-hand experiences. The more one can get of this kind of leadership, the better.

The success of a club depended much upon the leader; so the duties connected with this position were important. The leader had to have or acquire a vision of the possibilities in the given field. What does the field mean to society? How has it benefited people in general? What are some of the unsolved problems? How would the solution of these problems affect society, industry, and the like? Through such an approach, interest was aroused.

Then the leader so managed affairs that the pupils took the initiative. The club meetings were not conducted as a class, but rather as a conference or discussion club. The leaders were somehow in the background directing the mental and physical urge that came from the members. The members were unconscious of this. This made them feel that the club was theirs. It produced an unrestrained atmosphere where freedom of expression and spontaneity were encouraged and where the boys and girls were themselves.

The leader helped plan the work of the club. The council of an adult helped activities take on a definiteness that produced results. Weekly reports were made, new experiments recorded, individual conferences held. The leader was the director of interests.

All children have the play instinct but some of them need to be taught how to use that instinct. The same is true with interest. It is the play instinct in another form, and like the play instinct it needs directing. This the leader must

understand and do. It may call for the club centering on a group activity or each member following one to his liking.

THE RADIO STUDY CLUB

The radio has become so well established in this country that it is a necessity. Receiving sets are almost as common as telephones. Radio is one of the wonders of the age; it brings the world to our homes. Current events of importance, weather reports, crop information, lectures — educational and otherwise — grand opera, recitals — vocal and instrumental — in fact, the whole gamut of human interests comes in over the radio. It has woven itself so closely into our lives that it is almost a part of our great American family.

Because of its wide appeal many people are interested in it; and because of its wide usage we ought to be better acquainted with it. This led a group of boys to form a Radio Club.

The details of the operation of the Radio Club are shown in Chapter XI. The club organized by electing a chairman, secretary, and critic. A leader was appointed. The club adopted an order of business. It discussed the purposes of its existence and determined upon its method of study. Leaders were selected for each of the weekly meetings and topics for discussion were arranged. Outlines for study were also provided. The leader had to do most of the work at first; but always she transferred as much work as possible to the shoulders of the pupils. As soon as they were able to take the responsibility they were required to do so.

THE NEWSPAPER CLUB

The Newspaper Club is a splendid illustration of what hobby work can mean and do for children. Four girls who liked this kind of endeavor worked in pairs and each pair

published a paper, one the *Lincoln Trumpet* and the other the *Lincoln Tattler*. To run a newspaper and make it pay is no small job. The problems to solve are innumerable. When a paper has been established for years the job of keeping it going is not so hard. But to start a new paper is a big undertaking, especially when one's only available capital is one's will to succeed. Yet this with some native ability properly used can accomplish much.

The four girls were full of enthusiasm over their proposed projects. The spirit of wholesome rivalry prevailed, for there were to be two newspapers and neither one was going to let the other outdo it. So from the very start the energy and the thought put into the work were the maximum. The test of success was not the teachers' judgments but the approval of the student body and the adult group that the papers reached. Success was to be determined by the size of the subscription list. People will not buy readily a thing that they do not want. Accordingly at the outset these young folks had to study human nature and then find something that appealed to it. How this was done is told in a letter farther on. The girls also realized that, if the papers were to continue, they had to pay. But their spirits were high. They were keyed up to the situation; so they attacked it with a whole-souled enthusiasm characteristic of youth.

The success of these adventures was almost the sole aim of the children. They lived and breathed in an atmosphere that they created through their own interest. It was life to them to work on their paper. Every spare moment in school, after school, and at home was spent in preparation for the next issue. This was not work; it was play and so absorbing was it that the parents of the children frequently said that the girls would stay up late into the night reading, writing, and planning, if they were allowed to do so.

The following letter tells the story of the spirit back of the adventure. The letter was written two years after the papers were first published.

Dear Mr. —,

Because we wanted to do something that would interest the different grades of our Lincoln School in each other; because we wanted something that would indirectly combine the whole school with school spirit rather than class spirit; a friend and I decided that we would like to edit a paper. Both being fond of dogs we named it *The Dogland News*. The whole thing was made up of dogs — stories of dogs, articles about dogs, imaginary dogs and real dogs.

We got out two issues of the papers, but other children not as much interested in dogs as we were, were also not interested in our paper. Therefore we gave up our idea, and decided that a school paper would be the next logical step, for we knew that people are always interested in reading about themselves.

Shortly after this, when we were collecting material for our first paper, two other girls sent out a school magazine before we could get our own out. Nothing daunted, we continued in our work, and resolved to have a better paper than they.

Soon we realized that if two papers were to run in the same school they would have to coöperate with each other. So the staffs of both papers formed a literary club for the means of promoting both magazines. We decided that each paper would come out once every two weeks, that is, the *Trumpet* one week; the *Tattler* the next, then the *Trumpet*, and so on. We then went to Mr. — to secure his coöperation. He gave it readily and told us that he would do anything in his power to help us along.

The next question was that of financing our project. To start a paper with no funds is really quite a serious undertaking, as we have learned by experience. We ourselves had typewritten *The Dogland News* and we had no way of printing a good number of papers. We needed money for paper, ink, and other things. The

business did not do well at first. We thought it might be necessary to abandon the idea after all. Then, my father came to our help. He told us that he would give us the necessary money to start with. Mr. — told us that we might use the school mimeograph. At last! All was clear in front of us — (at least, so we thought).

Our first issue was sort of make-shift and done in a hurry. We did not know how to run the mimeograph correctly, and our work showed it. Some of it was blurred and some of it was scarcely readable. We printed only twenty copies and had a hard time selling them. Altogether it was a complete failure. But we did not give up. Both persevered, we knew that if we tried hard enough we could have a paper as good as that of our rival concern.

When Mr. — heard of our difficulties, he was kind enough to ask the editor of the local paper to talk to us about running a newspaper. I shall never forget the valuable advice that he gave us that February day two years ago. It surely did us good and our next paper showed it.

From then on each paper increased in size and quality. The children came to look upon it as a school institution. More and more people bought it, mostly in the four upper grades — the sixth, seventh and two eighth grades.

Many outside people subscribed. We charged only three cents for our paper, and regularly raised our standard. We tried to get the name of each eighth grader in the paper at least once a month, then they would buy it in order to see whether their names were in print. Another thing that everyone liked was a continued story "Stolen Jewels." That title was rather rough and ready, but we used it to attract attention. We made the end of each installment so exciting that people just had to read the next issue to see how it all was going to turn out. We had editorials, classroom riddles, jokes, advertisements, personals, and general news just like any other newspaper.

My friend and I were chief editors. We wrote everything that went into the paper. We took turns writing the installments of the serial. While writing it each editor had a lot of fun leading the hero and heroine into some awful predicaments; then the other editor had to get them out of it in some plausible way. We had one

reporter in the sixth and seventh grades to tell the exciting things that went on there. We did not need reporters in the eighth grades, because my friend was in one of them and I was in the other. Then last, but not least, we had a business manager, who tried to get the money from people who owed it to us. None of our help was paid, for we made them consider it a privilege to be on our staff.

All material had to be in two days before the day scheduled for the distribution of the paper. It was typewritten and then run off on the school mimeograph the afternoon before they were sold. That night we took the sheets home and put on the clips that held them together. Altogether we had seven issues, the first containing only one sheet of paper and the last seven sheets. We made ninety-five copies of our last issue.

Oh, the practical experience one gains in running a newspaper! I believe one meets with as many difficulties in starting a small school newspaper as in beginning a big city magazine. One never knows what difficulties one can meet if one does nothing to meet them, for the one way to conquer is to leap over the walls, and jump over the stones in the path to success.

And what do I think about the hobby club idea? Why, I think it is one of the best things in elementary schools. And why not? Isn't every one doing the thing he likes best? Doesn't it throw the people together that are interested in the same things? Doesn't it forward all the school enterprises? Doesn't it give the children something to do and something to think about? Doesn't it help the child decide his life work? Doesn't it give the child some idea of what the world is going to be like when he is old enough to begin work? Yes, indeed. It does all these things and many more. And all these things are necessary to a good school and good pupils.

Sincerely,

This was a splendid business adventure. These girls were not working abstract problems in arithmetic that had no appeal in particular but were coping with a situation that affected seriously something in which they had a keen interest.

Stencils cost money, and stencils were necessary or the paper could not be published. Paper was a necessity and it also cost money. How then was the required amount of money to be procured? Two sources were available. The first was revenue from the sale of papers. How much should a paper cost? The stencils and paper were the chief items of expense that had to be considered in determining the selling price. Again, the circulation possibilities had to be canvassed. When this was done it was found that it was possible to have a subscription list of one hundred. Accordingly the price was set at three cents a copy, a rather large price when compared with the daily papers of the big cities; yet that price had to be procured, and the girls knew it. This was business arithmetic of necessity and it was understood thoroughly.

This was not all. The circulation list was not easily secured. The editors could not do all the work; so managers had to be interested in the project. Finally, each paper had a circulation manager, who worked without pay. Through their efforts the desired number of subscribers was obtained. Among these were three people from our State Department of Public Instruction and an editor of a large Western paper.

The following letters indicate the interest taken by three of these people:

April 4, 19—

To Editors of *Lincoln Tattler*
% Second District School
Appleton, Wisconsin

Dear Editors:

I wish to express my thanks to you for the copies of the *Lincoln Tattler*. I have read them from beginning to end and I wish to congratulate you on the good work that you are doing in the way of both form and content. I am glad that I am on the mailing list for the rest of the year, but I wanted to be a subscriber and I do not

find a bill enclosed for the amount of the subscription. If I am to be particularly favored by receiving free copies, I shall of course appreciate them all the more. In any case I shall look forward to the new issue with much anticipation.

Very sincerely,

March 31, 19—

Editors, *Lincoln Tattler*

Appleton, Wisconsin

Dear Misses — and —,

I wish to acknowledge receipt of several copies of the *Lincoln Tattler*, of which you are the editors. I have read through every copy and desire to say that I enjoyed them immensely. I feel that you are doing a very fine type of project work and assure you of my hearty appreciation of any further copies that may be sent to me.

Such a paper as you publish should have an excellent influence throughout the entire school, both from the standpoint of improving English and from the standpoint of binding the entire pupil body together for one common purpose.

Cordially yours,

Dear Miss —,

Your father enclosed, in a recent letter, February 27th, an issue of the *Lincoln Tattler*. It delighted me greatly because the editor's father was a dear friend of mine many years ago when he was a rosy faced joyous young chap, chasing Gila monsters and horned toads in Arizona.

Besides, I too am in the publishing business. It is a splendid start and has the elements that mark an understanding of human appeal, first essential in making a paper popular.

It is well organized, covers a wide range of school activities, and is wholesome in its humor and clever in presentation of news events.

Such appeal in "Birds" touches the heart and shows public service that is refreshing, indeed. Best of all your paper is a won-

derful vehicle for developing imagination, expression, and literary talent, of yourself and your schoolmates.

With my congratulations, and hopes for a continuation of this work by you,

Most sincerely an old Arizona pal of your fine father,

The first source of revenue, and the most important one, was established. And some real problems in everyday arithmetic were correctly solved.

The second source of revenue was the advertisements. This was limited because people in the sixth, seventh, and eighth grades have not very much to sell. Yet it is surprising to see what these young people uncovered and what advertisements were sold. The following illustrates what was done. They are advertisements that appeared in the papers.

For Sale Cheap: A child's rocking-chair, oak, in first class condition. For particulars, see the editors, or address "X," care of the *Lincoln Tattler*.

For Sale: Very reasonable — a child's sanitary cotton-felt mattress, in very good condition. For particulars, address "T," care of the *Lincoln Tattler*.

Our reporter is ready to take your adv. Are you ready to give it? Don't you wish you could sell or exchange that white elephant — let us find a market for you.



For Sale: Artificial sweet peas.
For particulars, inquire of Miss
—, Eighth North.

Wanted: Modern three or four
room flat. References asked
and furnished. Please notify
editors, or address "Q," care of
the *Lincoln Tattler*.

For Sale: Hand-power washing
machine. Good as new. You
must act quickly if you want
this bargain. Inquire of the
editors, or address "Y," care of
the *Lincoln Tattler*.

SAVE!!!
The Lincoln School Savings
B A N K
System Will Teach Y O U To Lay
Aside a Fund for Further Education
Call and Talk It Over
Second Floor Room 7



We should have advertised.

Keeping the interest of the subscribers was a real problem. Various means were used to accomplish this. Interesting short stories were written by the editors or an original serial story was run, a section at a time. As already explained, the serial story was so arranged that an installment would stop at

a particularly exciting place, leaving the reader in an anxious frame of mind. Story contests were held and prizes were offered. This brought forward a generous response and the editors had to call for help to judge the papers. Personal notes were run because people like to see their names in print. A question box was conducted. Needless to say, this brought forth a good many perplexing questions which made the editors work to answer. The subscription list did not drop in number.

Another feature was the generalship and organizing ability displayed. A corps of reporters had to be on the job gathering the news from all departments of the school. This news had to be sorted and revised so as to keep the spite element at a minimum. The reporters kept busy and interested. The papers had to be interesting in order to sell. This was done by having in each issue something about all parts of school life. The girls waded through volumes of reading material to find interesting stories and funny jokes. Here came in much training, selecting, rejecting, amending, and judging. Each week an original story by one of the editors appeared. This alone required no small amount of work. One of the editors became so interested in dog stories that she wrote Mr. Terhune, the dog expert, regarding one of her problems and he was kind enough to answer. This incident she will never forget.

After all the material was gathered for each issue, it had to be arranged and stencils made. For one paper they were made in the school office and for the other at a private home. Then the stencils were run off on the school mimeograph. So eager were the pupils to get these papers that the demand usually exceeded the supply.

The papers were a decided help in improving the morale of the school. The editors did not hesitate to call attention

to any abuse of the property or privileges and frequently the teacher's attention was called to something which otherwise might have passed unnoticed. If the principal wished to send a message to all the pupils, the papers served as a splendid medium. They urged the boys to be manly in athletic contests; they urged hiking clubs, bicycle clubs, and baseball teams for the girls. All these were formed. When the Music Memory Contest was under way the editors worked hard to arouse interest and did much to make success possible. The following editorial appeared in the *Trumpet* under date of March 23, 1922.

Contest

There are but a few days left before the Music Memory Contest. Miss —— has certainly done her part. Those who have victrolas in their homes have done theirs. Miss —— thinks, as she stated in a recent interview, that we are getting along nicely, but not enough to stop working then and there. She thinks that learning the words of many of the selections will help greatly. What we want to work for now is DATES. They are weak spots in our armour. We want our grand old Lincoln to carry off the honors, don't we? And remember, eighth graders, this is the last year we can give anything to our school. Please make the most of it.

In another place in the same issue appeared the following under the caption :

For the Honor of the School

My, there certainly are a great many contests this year. Music for those musically inclined, baseball and basketball for the athletes, and an essay contest for the literary sixth graders.

Here is a chance for almost all of you to win some honor for Lincoln School. You owe it something; so work, work, work. Even though you do not get a thing, the school will certainly thank you for giving your best towards its glory. So go to it, sixth,

seventh, and eighth grades, and show that Your Class is the hardest working class and the best in the history of the school.

These articles had their results — the contest was won and in the next issue appeared the following :

Winners of the Contest

Good for Old Lincoln, best in the city. And it surely proved it at the night of the Music Memory Contest, when Wilder — left a sick bed, under a doctor's care, to win for his school the honor of having the most perfect paper in the city. That's what we all call school spirit! That's what counts! Our whole school is proud of Wilder — and of Marie —, Ione —, and Clarice —, the three girls from Lincoln out of the five in the district who tied for second place. We ought to be proud of Eleanor —, who won third place for her school, of the many honor pupils, and in fact all who showed so much school spirit in this contest, who though they won no prize, helped to strengthen the name of "Lincoln, the best school in the city."

Token of Appreciation

The school routine was broken last week, when the seventh and two eighth grades went into the music room during the seventh-grade music period. We all sat "two in a seat." Robert led a stirring yell for Miss —, who was seated at her desk. She turned around in surprise. Then Margaret came up and gave her a big bunch of sweet peas, from the children of the Lincoln School. While she was doing so, she delivered a nice little speech telling Miss — how much help she had given the children during the trying days before the Music contest, and how much they appreciated her help. Margaret wants it known that she had nothing to do with the writing of this article.

And so the papers carried on, urging, encouraging, suggesting, instilling new life into all the school and even the parents, for they too were enthusiastic.

Of course, these young people had their periods of dis-

couragement, when things did not go well and they were ready to quit, but they persevered and as a result they looked forward to the time they would enter high school and be on the staff of the high school paper. All did go to high school and are doing good work.

There was no type of training in our schools that did more to make these girls come into themselves than did the responsibility of making a newspaper project a success.

A few weeks ago a young lady who is now a reporter for the local newspaper and who was an officer of the high school paper last year said that these girls who had edited the Lincoln newspapers contributed more and better material as freshmen than did the upper-class students, that their material seemed fresher and more original, and that they knew how to go about the work.

Further details relating to the Newspaper Club are found in Chapter XII.

THE FORESTRY CLUB

The Forestry Club started in 1922. It was occasioned by a heavy sleet storm that visited the Middle West. Our city, the morning after, was a beautiful fairyland. Trees were coated with ice an inch thick. Branches were loaded so heavily that they rested on the ground. Small trees were so weighted down that they were bent over to one side so far that their tops were frozen into the snow and ice. Our sidewalks in many instances were impassable because the heavily laden branches bent down so that they were frozen into the ice. So heavy was the load on some trees that they were split into two parts or large branches were torn out, pulling with them long strips of the trunks. The trees on the school grounds were in bad shape. This presented a definite problem.

Our local paper procured copies of a bulletin entitled

"Tree Surgery." This was used as a text. The club of boys met after school and studied how to repair the damaged trees. The boys found that trees are much like human beings: they respond to kind treatment. They learned that neglected wounds are dangerous, and that any wound should be treated with care; that medicine in the form of shellac and tar should be applied to disinfect and heal. They learned how to cut off a broken limb.

They studied the rudiments of tree surgery until the weather was warm enough for outdoor work and then they began repairing the trees. This was no small job, for many of the trees were large, two of them very large. However, the boys borrowed long ladders from local hardware stores, brought ropes, axes, and saws from home, purchased the tar and shellac, and did the work. It required four Saturdays for the boys to trim and repair the trees.

It was interesting to note the remarks of passers-by. Some said that the boys could not do the work, but this only urged them on. When the work was finished the boys took keen delight in comparing their work with that of other people who had trimmed trees in the neighborhood of the school. Most of this work done by the boys was crude and amateurish, but a knowledge of tree surgery was displayed by it; so it gave our club members a feeling of having done well a difficult piece of work. From this the Forestry Club got its start. It became so popular that there were always enough members to insure its existence.

Each year an organization was formed. A president and a secretary-treasurer were elected. These officers ran the club with the help of the leader. The president conducted the meeting, called for reports, made assignments, and made appointments. The secretary did the usual work connected with that office.

Further details concerning the working of the Forestry Club are given in Chapter XIII. There the reader will find an outline of the work that was done, organized in terms of the available reference material. Portions of the minutes are included to help show how the meetings were conducted. These minutes were written with great care and detail by the secretary. The list of reading material will be very helpful to any who plan courses similar to this one. At the end of Chapter XIII a reading chart is given that shows how many books each boy read relating to forestry. The books were popular. The boys liked them so well and read them so rapidly that it was difficult to find time for reports.

Yet this was not all the activity. Each year the club took a trip to Door County State Park, which is about ninety miles from Appleton, to see the beginnings of reforesting. Of course, it required money to make this trip, for each boy had to have three meals, a place for sleeping, and car transportation up and back. Accordingly, early in the year, plans for making money were made and set into action. Programs were given. The boys did most of the performing although some outside talent was contributed. When the time had arrived for the trip enough money was in the treasurer's hands to pay expenses. Two fathers were so interested in the trip that one sent a check for ten dollars and another for five to help pay expenses. Along with this came some good training in English, for letters of thanks were sent to those who helped in the program and to the two fathers.

Planning the trip was fun. What should they have for supper? Wieners, baked beans, buns, butter, cocoa, cake, and apples! "Well, how many wieners can a fellow eat?" "If one fellow can eat three and there are fifteen in the bunch, that means forty-five wieners." And so on with the buns, butter, beans, and the rest of the supper. The other meals

were planned in a similar manner. The supplies had to be apportioned to the members. One boy brought buns, another butter, another salad, because the food came from the various homes represented. This meant much planning and checking. Splendid training, and the boys were glad to do it. Cars were provided.

The boys enjoyed the trip immensely. The Superintendent of the State Park showed them around, pointing out places of interest and telling of various problems connected with forestry. He showed little three-year-old seedlings not yet set out, also plots where the trees had been out all the way from three to eight years, which made clear what a stupendous task it is to reforest our nation as it should be reforested. The boys learned that it takes forty years, at least, before the trees in a crop of timber are large enough to use, and that if they planted such a crop now they would be men, well along in life, before the timber would be fit for market. They realized that trees are subject to diseases that sometimes get into forests and do untold damage, that fire is an enemy of our trees, and that the careless hunter, camper, and pleasure seeker are the cause of much destruction. They learned that we use timber faster than we grow it and that unless we either curtail its use or stimulate its growth serious trouble is ahead.

While there the boys slept in barracks that are used by cherry pickers. Each had a single bunk, which was not too comfortable, but no one grumbled. Meals were eaten out of doors around a campfire and all had to help. This gave them a taste of outdoor life and also a little insight into the life of a forester.

The club had its permanent results. The following letters from former members are examples of its influence:

The Forestry Club of the Lincoln School was something for me to look forward to all week, when I was in the eighth grade. It

gives me the same amount of interest and pleasure, to look back on it now, as it did to look forward to it last year. The club was all anyone could desire, for it contained knowledge, interest, and pleasure. I know I shall never forget the trips taken with the club, nor the interest that I had in planning for the trip.

But looking on the serious side of it, think of what is happening to the United States and what will happen in the future if the timber waste continues. Think of what you can do to help the situation.

Wishing success and interest to the club,

An interested Forester,

I liked the Forestry Club more than anything else at Lincoln School for I enjoy the study of nature. I don't believe one of us will regret joining the club.

It taught me that our country is in danger of losing its lumber supply and that without trees we would have floods, famines and drouth, instead of flowers, birds, rich food producing country and beautiful scenery.

I will always be interested in the Forestry Club, and glad to help if I can, for I want to become a real Forester to preserve and replant the forest.

Sincerely,

Save the trees and you'll
save all, is my motto.

My club was the Forestry Club. It was conducted in the Lincoln School, and met every Thursday. The name of the club was "The Badger Forestry Club."

We studied the conditions of the forests in the United States and the protection of the forests. We found out what an important place the forests had in the making of our country, and how the European countries protect their forests. The value of our forests was talked about. One of the main points discussed was, "Is Appleton dependent on the forests?"

We enjoyed the club because it was conducted in a businesslike way. The boys in the club were ready to take any reading and give it before the club in the next meeting. The story books on the subject of forestry were interesting and helped us learn about the forest and its protection. Another reason why we enjoyed the club was that the officers were fair to all and gave each boy his equal share in the work.

Charles —

THE NURSES' CLUB

The work of the Nurses' Club is presented in the words of the leader of the club.

Our meetings were held at the Vocational School, for there we could have the necessary equipment and plenty of room. At the first meeting we elected officers who took charge of the group in a businesslike fashion, called roll and collected dues. After this, the girls decided that it would be a very good plan if three of the group were to be responsible for presenting the subject matter for a lesson. They thought the interest would be more acute, since each person would have a turn, and there would be more or less competition to see which three could do the best. A short history of nursing was given so that there might be some background. The plan of the course was discussed.

It was interesting to hear the comments different ones made pertaining to various subjects. When we were discussing the choice of the patient's room one girl spoke up and said that she would hate to have figured wall paper in her room because she would be "counting the figures all the time." There were other contributions and comments that were gratifying for we were assured that each one was thinking.

Some of the girls knew how to take pulse and read a thermometer, and what the normal temperature is. This showed that, even though three pupils had the topic, the others, as soon as they knew what the subject was, would scurry around and find information in one source or another. This was true of almost every

lesson, though, of course, some topics interested some more than others.

When we were talking about burns someone suggested putting water on the burn. Another girl fairly jumped from her seat saying, "My father was burned once and a friend of his threw water on it which made the burn much worse, and he suffered terribly after that." The illustration made very much of an impression.

During our course in infant care questions were brought to class that had been asked of the mothers at home. This work made the girls think. The mothers had to be on their guard for they knew that they had to answer these questions for the girls or they would ask them at the next Club meeting. This helped establish an interest in caring for babies and put the girls in a position to be of real service in the homes, caring for the babies. It also made them useful to people who wanted help. The experience the girls had as a result of the Club work was much worth while.

The visit to the milk company, where we saw how the milk was pasteurized, bottled and made ready for delivery to the consumer, was very interesting. The girls will remember that trip particularly, for they were treated to a bottle of chocolate malted milk, which they relished particularly because it was nearly lunch time. After having this information given to us, I felt it might be well to check up on it and find out how much they really got out of it. The written lesson brought forth a great revelation, for it showed that they had really assimilated much.

The Fire Chief helped considerably by explaining the use of the pulmotor. Many questions were brought up by the class.

Nearly half of the girls in the group had been in the class the year before, and when I asked them why they came back (I also asked the new girls) the reply that came from the whole group, with the exception of four, was that some day they hoped to be nurses. Whether they enter training or not the time was well spent and if they do have an opportunity to take up the profession they will have a good background.

Further details concerning the Nurses' Club may be found in Chapter XIV.

THE MECHANICS' CLUBS

The mechanics' group was composed of three clubs, the Electric Club, the Woodworking Club, and the Mechanics' Club proper. All these were united under the direction of one leader, who in turn had leaders appointed from each club to help him with the various activities. This was an adventure similar to that which a teacher might have to engage in provided she could not get other people to help her in organizing interest clubs in her room. These three clubs were handled successfully and the boys worked interestedly on their various undertakings. It is indicative that this kind of work is possible where one teacher must take charge of a number of clubs. In Chapter XV there is a brief outline of the work covered and copies of several weekly reports to indicate how the work was carried on.

THE SALESMANSHIP CLUB

The Salesmanship Club has had an interesting history. During its life it has been under the direction of the manager of a large dry goods store, a man who is interested in the preparation of people for sales work. He has learned from his experience that it is costly to train salespeople in his store, and that the time is not far off when these people will have to be trained before being employed. With this in mind and since the desire of the school was to serve this community to the best advantage, the school and store joined forces in this project.

The Lincoln School Salesmanship Class was established on a one-semester program. The class met at eleven A.M. once a week for a period of forty-five minutes. Each week an assignment was carefully printed in outline form on a large chart that was made in calendar form with the day of the month

printed in subdued color in the background, while the outline was printed over the day of the month. This made the calendar rather oblong, but very picturesque. In the vacant places the motto of some store was placed.

This unique way of assigning the lessons had a twofold purpose. One was to stimulate the interest of the young individual by assigning his lessons in a manner different from what he was accustomed to. The other was in the relation to review. The whole course took only five calendar cards, which, when hung up, were quickly read and added a personality to the salesmanship room. When reviewing, the outline was usually copied and the lessons easily obtained. Visitors, upon entering the salesmanship room, went immediately to the wall and studied with interest the outline described.

The outline itself consisted, first, of a special topic assigned from the previous lesson, such as "Our U. S. Mint," "The Sales Check in Appleton," and "Ancient Methods of Trading." Then came the outline of the lesson. Lastly, each individual was given a question for intensive study. These were reported at the beginning of the next lesson. This last scheme was devised chiefly to stimulate interest throughout the week.

A discussion on the why and wherefore of good salesmanship was not enough to arouse all the vitality of a modern seventh or eighth grader. In order to provide practice in the principles learned, candy, peanut, and sandwich sales were given. The first of the series was given in the school but was not well planned. This was done purposely to show the necessity for a well thought out line of action. Posters were made by all members, advertising the sale a week in advance. The four main points of salesmanship, however, were not brought out, namely, attracting attention, arousing the interest, creating desire, and closing the sale. Consequently, the sale was a failure with only a little over two and one-half dollars'

profit. Something was wrong. There was plenty of candy but it did not sell. Why? This brought about the opportunity for giving the first real lesson in salesmanship.

A study of the sale that failed was made. It was discovered that the class had not shown much interest. This in itself was a serious handicap. How could anyone else have interest in a sale if the people who were conducting it did not? Interest begets interest—this was the first discovery. There was no well organized plan or individuality given to the sale. People are not attracted much by the commonplace, but by the unique. The store that attracts customers continually is finding individual ways of getting its goods before the public. Accordingly the necessity of a plan was made clear.

Another sale was planned. It was preceded by a poster contest in which the whole school took part. Interest was immediately aroused and attention focused on the sale. Prizes were given for the best posters. Students joined the contest of their own free will and there was a large number of contestants. Then, too, a color scheme was used. St. Patrick's Day was chosen for the sale; so green and white were taken as the colors. The girls made pretty dresses and bonnets of green and white paper, the candy was placed in boxes, daintily trimmed in those colors, and the sales place was tastefully and attractively trimmed for the occasion, following the same color scheme. The posters, the color scheme, and the enthusiasm of the club prepared the whole school for sale day. And when it arrived the goods were all sold without any difficulty.

The local paper gave the following report on the project:

STUDY CAUSE OF FAILURE, THEN WIN SUCCESS

By analyzing the causes of failure and success in its sale projects, the salesmanship class learned some real lessons in business. The club was led by the manager and salesman of one of our local stores

assisted by a kindergarten teacher. The club is composed of members of the seventh and eighth grades of the school and it has been conducting candy sales in order to gain actual experience in selling. The club makes its own posters advertising the sale, studying at the same time the things the poster must contain to attract the attention of the public and accomplish its purpose.

The second sale to be given by the club was held Friday afternoon in the school building and netted more than seven dollars. The sale held two weeks before had been a failure; so the members used the failure as a means of making their future sales real successes. They discussed the reasons why it had failed and then worked out a plan which would correct the causes for the former failure.

The class motto was, "To do the right thing at the right time; to do some things better than they were ever done before; to know both sides of a question; to be courteous; to be an example; to work for the love of work; to anticipate requirements; to develop resources; to recognize no impediments; to master circumstances; to act from reason rather than rule; to be satisfied with nothing short of perfection."

Shortly after the class was organized and was running smoothly, the problem of practicing the rules learned in the classroom (by launching different sales) matured to such an extent that the idea was taken up with enthusiasm and finally voted upon and adopted. It had been generally accepted by all members that the first sale would be more of a trial than anything else, the second would be an improvement over the first (which it certainly was), and the third would cap the climax by climbing as near that pinnacle of success as a graded school class in salesmanship could hope to reach.

A third sale was attempted a little later, on the day of the annual school exhibit. This meant that provisions must be made for both an afternoon and evening sale. Then, too, adults would be visiting the school and the sale must be of

such a character as to attract them. This was to be a sandwich and candy sale. It was decided by the class that all sandwiches were to be sold in the afternoon and candy to the mothers and fathers in the evening. Every individual in the class, and in other grades too, signed to bring as many sandwiches and as much candy as possible. When the necessary merchandise arrived, however, more sandwiches were stacked upon the table than candy. The problem presented itself as to how to obtain the necessary amount of candy. Those in charge of the immediate selling at last hit upon a plan of action. They decided to call the evening sale a contribution sale and to ask the coöperation of the delicatessen stores of the city. Good business methods were followed in preparing for the sale. It was widely advertised, interest was aroused, and all the goods were sold. The boys sold the sandwiches and the girls the candy, taking in a grand total of fifteen dollars and forty-five cents.

The following outline was used as a guide for discussion and study in the club meetings :

The aim of the Salesmanship Club was to help those students who hoped at some time to become business men and women. Its purpose was to learn what the essentials of business and salesmanship are.

The club was organized and the officers were elected. Each meeting was conducted according to parliamentary rules.

Every member was required to do outside reading on salesmanship, and a record was kept of the amount of reading done by each member. This record was taken immediately after the meeting was called to order.

In the study of salesmanship and business the following principles were brought out : a successful business is founded upon seeing the need of a certain kind of service in a community and then intelligently filling that need. The reason

why many business institutions fail is because their founders have not solved satisfactorily both these problems.

The essentials of salesmanship consist of a salesman who knows his goods and believes in them and the service that is to be rendered by the goods. The personality of a salesman has a great influence upon his success. A successful business man generally has the following traits: he is good-natured, possesses self-control, is able to talk freely and fluently, understands people and anticipates their wants, sell his goods for the service they perform, thereby building up a clientele, and last of all is able to talk something other than shop.

The subject of the "Health of a Salesman" was discussed at one meeting. It is necessary that a salesman possess good health. Personal efficiency is not possible without a clear, alert mind. But a clear, alert mind is not possible without a sound body. Special care should be taken to avoid anything that tends to lessen one's energy and so to interfere with one's chance for advancement and success in life.

"How Can a Business Be Built Up through Service?" was another topic of discussion. Different methods by which the customer could be served were studied, some of which were making friends, establishing rest rooms, public telephones, post-office service, and deliveries, and giving prompt attention to customers.

The principles of salesmanship were not only discussed but practiced. This was done in several ways. On the first excursion trip to a large department store, the members of the club were taken through the store from the stock rooms to the office. One club period was spent in studying and making out sales checks, charge accounts, C. O. D.'s, and optional slips. Another period was spent in learning how to wrap difficult packages, such as brooms, balls, baskets, etc. Each member was also taught how to make change correctly.

In the next store trip every member had the experience of actually making out sale slips, C. O. D.'s, and optional slips, wrapping packages, operating cash carriers, and making change behind the counters in a department store itself.

Excursion trips were also taken to factories and mills, so that the club members gained some knowledge of how goods are manufactured. Dramatization of a conversation between a customer and salesman was held. Plans to hold an actual sale in a store were made but because of shortage of time they did not materialize.

Several members of the club entered a contest held by a local store for making a booklet on salesmanship. These booklets were made of clippings on salesmanship, of types of sales checks, and of pictures of window displays.

Another contest was held. It was an essay contest on "Things I Have Learned This Year about Salesmanship."

Much of the success of the Salesmanship Club was due to the splendid coöperation of the store and its employees.

Further details of the work of the Salesmanship Club may be found in Chapter XVI.

THE TEACHERS' CLUB

Our first Teachers' Club was composed of eighth-grade girls who felt that they might be interested in teaching. The aim of the club was to establish some high ideals as to the possibilities of the teacher. That teachers have influence is taken for granted but whether it is constructive or destructive is important. That this influence should be for upbuilding is necessary, for upon the boys and girls of to-day depends our leadership of to-morrow. Since the ideals established in school often stay for life, it is necessary that school people have a high ideal of service. This ideal of service was approached

through reading such books as *Evolution of "Dodd,"*¹ *The Brown Mouse,*² *The Rural School from Within,*³ and like material, to which the girls responded splendidly. They were moved by the tragedies and lived through the trials themselves. They felt that, if it happened to be their lot to teach, they would value highly the human element and would not become so absorbed in teaching a subject that they would forget to teach boys and girls.

The club visited classes; after each visit the teacher in charge of the school or room talked to the girls regarding her work and they in turn asked her questions. A first-grade teacher was asked, "Why do you divide your class into three sections?" and a kindergarten teacher, "Just what do you teach in kindergarten?" This naturally led to discussions of problems of discipline that arose in the school, social problems, and teaching problems. The teachers always gave their views and the reasons for them and the girls did likewise. This led to a healthy discussion of school problems and a personal relationship that otherwise could not be. Near the close of the year the effects of the club could be summarized by such remarks from the girls as, "I never knew that teachers were so human," and, "All these places we have visited and all the talks were so interesting that I scarcely know which grade I would like to teach"; and in her graduation essay one of the girl teachers closed by saying, "The True Teacher may well be proud of the title, for her work is akin to that of the Master Builder, the creation of a temple, not made with hands." Another said: "I realize that as I build a life I build a nation. Building a life is similar to building a house, because the pur-

¹ Smith, William Hawley: *Evolution of "Dodd,"* Rand McNally and Company, 1884.

² Quick, Herbert: *The Brown Mouse*, Bobbs-Merrill Company, 1915.

³ Kirkpatrick, Marion: *The Rural School from Within*, J. B. Lippincott Company, 1917.

pose for which one is building determines how the building is done." Then after enumerating some of the ideals the classrooms should have she concluded by saying, "These I believe can be accomplished in the classroom and because a nation imbued with these ideals and characteristics is a strong nation and a safe nation I want to have a part in stamping these ideals and characteristics upon my country."

These girls had begun to think in big terms and to see things in their interrelations, one with another. They saw the school and teacher through more observing eyes and in a different light. Their sympathies were aroused, their ideals were raised, and they saw life as they never before had seen it. If they become teachers, they will be better for having had this experience.

The first Teachers' Club was so successful that every year brought with it a goodly number of candidates. This was one of the most popular clubs. Perhaps the books in the interest library and the method of handling the club were the reasons.

The books appealed to the girls. The required reading was self-imposed. The large amount that the girls wished to read was significant. The book reports were planned not to tell the whole story, but to tell just enough to arouse interest so that the others would read the books.

The club visited various grades. The teacher always was prepared and had some particular kind of lesson ready to demonstrate. The club visited a first, second, and third grade and watched the progress of children and the development of the work through these grades. After each visit the room teacher explained her aims and gave reasons for doing each thing. Then the following week the order of business was a discussion of the lesson observed.

These visits were fruitful in many ways. The girls became anxious to try teaching. Some of them were given an oppor-

tunity. Each teacher took a girl who liked the work of her grade and assigned her a definite period when she was to teach a class in reading or geography or whatever else the girl's interest desired. The room teacher taught her how to make a lesson plan and get ready for the class, so that each time a girl taught a class she had a definite aim to work toward and means planned for attaining that end. The following is a description given by a room teacher, of a geography lesson, conducted by one of the eighth-grade girls:

There are a number of eighth-grade girls in our schools who are ambitious to become teachers. Every possible help is given to encourage them. They are given an opportunity to teach the subject they wish, in the grade they prefer. These girls are taught to write lesson plans, including the assignment, teacher's aim, introduction, body, and conclusion, such as those written by practice teachers in a normal school.

The lesson which I am about to cite was taught by an eighth-grade pupil teacher to a third-grade class in the Lincoln School. The subject of her lesson was "Homes." It was taught in a very interesting manner. The lesson was introduced through the naming of different homes within the children's experience. The homes mentioned were the Indian wigwams, Eskimo houses, bird houses, beehives, chicken coops, dens, log cabins, dog kennels, and many other homes. As they were naming the homes one of the children suggested going to the board and writing the list to see who could write the longest list. The teacher consented. Some children named as many as fifteen different kinds of homes.

The text was then read. After the lesson had been read the children compared our homes with the homes of the Eskimo. They compared the homes as to the materials, furniture, and location. They also compared our homes in the city with the country homes as to surroundings, size, and distance from town and made many other interesting comparisons. In comparing our homes with the homes of the animals, many interesting points were taken up. One

child said that he thought that a dog's home was just as good to him as our home is to us. A worth-while discussion was carried on in connection with bird nests. The children came to the conclusion that it was very cruel to destroy birds' eggs and that they would never do it again or let anyone else do it if they could help it.

The interest did not stop here, for the girls frequently helped the room teacher prepare educational seat work. They also helped make flash cards for reading and number work and various other lessons.

Besides taking part in these activities a trip to a county normal school was taken. Here the principal of the school took pains to have a well planned half day ready for the club. The girls saw the model school at work and saw teachers in training teach these children. They saw the training teachers teach the embryo teachers how to teach. They learned something of the training one must have if she wants to teach and they realized some of the problems a teacher must face.

Magazines and newspapers were read for educational news. The following list of titles is taken from the club scrapbook. This indicates that the girls' interest carried farther than the forty-five minutes once a week.

"Start New Study Course Monday at Teacher School"

"Directors of Eight Schools at Conference"

"Blames Modern Parents for Childrens' Morals"

"Directors of Valley Schools Will Meet Here"

"Educators Will Debate Teacher Qualifications"

"Truancy No Longer Is Big Problem in School"

"Kindergarten Room at Wilson School Now Has Fully Equipped Library"

"Want More Rural Schools to Give Hot Noon Lunches"

"Build Character of Boys to Make Better Citizens"

"All Kinds of Training for Ambitious Folks at Appleton Trade School"

- "Use Trade Basis in Vocational School"
- "Dale Will Vote for High School"
- "Trade School Helps Girls Get Started"
- "Spend More Time with Youngsters, Parents Advised"
- "Add Variety of New Books to New Library Shelf"
- "Teachers Seek Standard for Language Instruction"
- "State Colleges Like Debate Plan"
- "Start Speaking Contest March 16 at High School"
- "Rural Children Try for Prizes at Commencement"
- "Parents Too Lax in Letting Young Stay Out Nights"
- "Deaf Children Taught to Use Their Eyes as 'Ears' in School Here"
- "Thirteen Schools Finish Their Reading Circle Courses"
- "Fifty Parent-Teacher Clubs in County School"

A further summary of the work of the Teachers' Club is given in Chapter XVII.

THE ARTS AND CRAFTS CLUB

The purpose of the Arts and Crafts Club was to stimulate those pupils who had a talent and a strong feeling for art and who had a desire to give expression to these in the creation of beautiful things.

The aim of the course was to train the aesthetic sense of the individual, to bring out freedom of expression, and to open the minds of the students to the fact that each has desirable ideas that are worthy of development and to the realization that much inspiration can be drawn from the nature that surrounds one every day.

Art is not an illusive, visionary, ethereal thing. It is something that is necessary for successful living. It is the expression of the beautiful. Through it one's sense of harmony and desire for the beautiful are satisfied. For it the world pays more than for raw material. It is the art in a building that

gives it distinctiveness. It is the art in a dress that gives it individuality. It is the art in a house that gives it a sense of dignity and an atmosphere of peace and quiet. It is the art in the decorations that lends the element of refinement. It is the art in an advertisement that makes it attractive. Without art life would be dull indeed. And the higher our civilization develops, the greater part will art play.

When Edward Bok became editor of the *Ladies' Home Journal* very little art was used in building the homes of the working man. It is not difficult to-day, in any city, to pick out the pre-Bok houses from those that came after his time. He made available to the poor man, through his magazine, the services of some of the best architects in the United States. The result has been the modern, medium-sized house, a building that is pleasant to look at, whose rooms are conveniently arranged, and whose finish both inside and out is conducive to happy living. In short, it is a house of utility and beauty combined. Art made it possible.

In olden times beautiful clothes were for the favored few. But to-day dress patterns that give individuality can be had for a few cents. Ornaments and designs that add grace and beauty to one's attire are available to all. Art is influencing in no small degree the wearing apparel of to-day.

And this is just nature asserting itself. Almost everyone craves the beautiful. The people in the arts and crafts group desired the opportunity to give expression to their sense of the beautiful, and opportunity was provided by making useful things for the home and for personal adornment.

In order to get the best results, one must first have an imagination and a keen sense of observation. Artists get most of their inspiration from nature but in order to get the inspiration one must learn to observe, for it is from what one observes that the inspiration comes. An inspiration fed by a

fertile imagination grows into a beautiful idea — a mind reality. But to reproduce the idea in a concrete form takes persistence, patience, and faith. A work influenced by these is put through the refining process that makes it a kin of art.

The work of the club was not finished art but its quality was good enough to prove that the effort was decidedly worth while. Good books and pictures were studied, field trips to places of interest were made, and discussions on art were held. Dainty things were made, the kind that a girl likes to wear and the kind that adds to the attractiveness of a home. Designs were stamped. Motto cards were painted and printed. Bottles and jars were enameled and designed in oil paint, and novelty bows were added for further decoration. Other bottles and jars were decorated with sealing wax in both the raised and smooth surface style. Designs were cut out of paper and mounted on tin boxes, then covered with a final coat of shellac. The boys in the class spent most of their time working on the cover and topic page of a boys' magazine.

Notebooks were kept which were divided into three parts; home, self, and commercial. Pictures, advertisements, and news items relating to art were cut out of magazines and papers and pasted under the various heads. This helped the members of the club see what an important part in life art is playing, especially in the commercial field to-day.

The scrapbook the children made was one of the best ways of developing their appreciation of beautiful things. Good taste is an inheritance to most of us, but we need to be taught how to make use of it. We all pass through a Zane Grey stage of reading, a liking for only jazz music, and an appreciation of only the rococo in house and personal adornment. With careful guidance on the part of our teachers and parents most of us "grow up" to the keener enjoyments of real literature and classic music. Listening to good music is the best way

of appreciating it, reading good books develops a taste for good literature, looking at good pictures teaches children color harmonies and line composition.

Our magazines are full of good "art" material painted by some of the best artists in the country. They come in the form of advertisements glorifying the products of our factories and workshops. In looking over the scrapbooks one can see that the children fully appreciated the best of these pictures. The notebooks were bulky affairs, containing material on many different phases of art. The first section was given up to a study of the home. Views of houses in good taste, floor plans showing that unbroken wall spaces, closet space, and general convenience had been considered, and interior views of furnished rooms were used. The result was that lovely colonial doorways, well balanced dormers, and a good sound plan characterized the houses they selected. The interiors were shown in two ways — first by cutting out pictures of rooms that pleased them and then by cutting out pictures of rugs and furniture and arranging them tastefully on a background of white paper. The colors selected for their window hangings, rugs, and upholstered furniture showed that they had trained their eyes to a color sense, and the pieces of furniture selected showed that they were developing a sense of line and group composition. The trade magazines of two of the local furniture dealers were used to teach them period styles of furniture. Several "period" rooms were worked out.

The second section of the notebooks was given over to needlework art. The ribbon novelties that every girl loves to make, embroidered table and bed linens, and design in clothing were all represented. Lamp shades, samplers, and needle-point tapestries showed to what uses the girls could put their needles for the adornment of the house.

The last section, while not so full of practical material as the first two sections, showed the greatest sense of color and line of any of the sections. The girls selected their pictures entirely from advertisements and anything that was beautiful had a place in this section — gay colorful pirates contended with copies of quiet, restful dry-point etchings. Silhouettes especially were emphasized.

Throughout the course it was kept in mind that the chief aim was to train the aesthetic sense. We aimed at freedom of expression, we tried to open minds to the fact that we should be ourselves and should draw our inspirations from nature and the immediate needs of our surroundings.

Further details concerning the Arts and Crafts Club are given in Chapter XVIII.

CHAPTER X

THE OUTCOMES OF THE PROGRAM IN OPERATION

THE clubs were not organized until the year was well under way, but from the beginning the pupils knew that the clubs were to be organized. They also knew that the price of admission was that of being up to standard in one's work. This meant that, if one wanted to join, he had to pay for it with attention to his school work. This produced better application to school affairs. While we have always tried to make our school work interesting, we have not always succeeded in doing it, so that children have not always obtained as much out of their classroom efforts as they might. The desire to join clubs helped to make the children watch their daily performance more carefully and as a result better work ensued throughout. Incentive was used as a means of getting children to work. Instead of saying, "If you do not do this, you will fail, or you will be punished, or you will receive red marks on your report card," the emphasis was put on the positive side. If a child did creditable work, he was given the privilege of joining his chosen club.

The interest clubs helped make the spirit of the schools better. They gave the children a goal to work toward. To have the privilege of belonging to a club was a reward for work well done. Because the club work was generally liked almost everybody tried to do a grade of class work that permitted his joining one. This tended to produce a more

studious attitude. More time was devoted to mastering the class assignments and less time was devoted to mischief.

The clubs were varied enough so that there was variety of appeal. Almost everyone found a club that served as a goal toward which to work. The mechanically inclined had the Mechanics' Club; those who had literary inclinations had the Newspaper Club; those who had a liking for art had the Arts and Crafts Club; those who liked the out-of-doors had the Forestry Club; the radio enthusiast had the Radio Club; the medically inclined had the Nurses' Club; and those who liked business had the Salesmanship Club. Because each child is a bundle of potentialities, possibilities, aptitudes, and interests the clubs struck a responsive chord. "That something" within the child that gives him individuality, that makes him a personality and not an imitation, needs development and it needs the right sort of environment to call it forth. The ordinary classroom provides very little opportunity for finding "that something." The clubs were a beginning in finding a way to discover in each child that possibility, aptitude, potentiality, or interest which helps to make him an individual.

The children in the clubs presented few problems in discipline. Not infrequently the bright child who gets his school work done in less than average time has nothing to do, and unless something is provided for him trouble is likely to follow. The interest libraries helped considerably in this. One was provided for each club. In building the library two types of books were kept in mind: first, content books dealing with the subject matter pertaining to the club and, second, stories that were related in some way to the club work. The content books were discussed in the club meetings. The fiction was read during the child's spare time. To find time to listen to all the book reports was a problem. It was the

rule of each club that the second book could not be taken until a satisfactory report of the first one was given. Children who apparently did not read much, at other times, seemed to like this material and to find pleasure in it. There was scarcely one member, of all the clubs, who did not do considerable reading of this kind. This means that each child had continually in his possession a book that he was anxious to read. He had it in his desk with him in school and during his spare moments he was glad to read it. Because of this, the boys and girls had little time in which to get into trouble. Their time was taken in doing something in which they had a genuine interest.

As we said, few cases of discipline arose. In fact, the ones who had been perpetual trouble makers ceased to be so. One girl was a bugbear to every teacher who had her during her grade-school life. Each teacher dreaded to have her come into her room, not that she couldn't do the work — she was bright enough — but she just didn't care very much and didn't try hard enough. She was a worry to her parents; frequent conferences were held by the teacher, parents, and principal. Not until she was in the eighth grade and had the privilege of joining a newspaper club did she straighten out or come to herself. Here she had the opportunity to do a thing that she wanted very much to do. She and another girl edited one of the papers. They spent hours in reading books to find material for editorials and hours in reading books, magazines, and newspapers for funny stories and jokes. It was a considerable task to make a newspaper a success, but she was determined to make it so. She became completely absorbed in the work. She was no problem in school for the rest of the year and has not been since. Her work in class and on the newspaper was high grade.

Another case is that of a boy who was a problem at home.

He was inclined to be sullen, stubborn, and hard to handle. He carried this attitude into the school. His teachers could not analyze him or find the means to bring him out of his shell. Not until he was in the seventh grade and had the privilege of joining one of the clubs did he awaken. He was so interested in this activity that he was elected secretary. He watched the newspapers and magazines for material pertaining to the club work. He always had a clipping in his pocket ready to paste in the club scrapbook or to read at the club meeting. He went to the professor of botany at the local college and induced him to help make a list of library books suitable for club reading. He proposed the name of the club and suggested a badge for it. He was ready to do anything required of him and always had suggestions as to what to do next. His father voluntarily said that during this time the boy seemed to awaken and get a new vision of life, and that he was easier to manage in the home. If the clubs did nothing more than this, the efforts would have been worth while.

Clubs provide for an enriched curriculum. There are always problems arising as to what to do with the children who have a high I. Q., who do the work of their grade very well and do it easily. Such children from the standpoint of verbal intelligence rank very high, and because they easily accomplish the requirements of the grade their tendency is to form slovenly habits. The assignment requires so little effort on their part that they do not get so much training from the regular grade work as do those who must work hard in order to pass. Training comes from strenuous endeavor to overcome difficulty. It is this type of intellectual effort that fits one to do the work of civil life. Because the bright children do not experience difficulty in overcoming schoolroom problems, their training may not be so good a preparation as is that of the children of mediocre ability.

Educators realize this and are anxious to overcome it. How to do so is a problem. They feel that much good human material, which should contribute in a splendid way to society, is not getting the preparation necessary to make that contribution possible. To avoid the bad effects, which are bound to come if the bright children are not working up to capacity, some have hit upon the idea of skipping grades. As explained earlier in this book, the plan works well in one respect. The children do work up to capacity, for they usually do the work of the advanced grade well, but there is one big disadvantage. While their verbal intelligence permits them to handle the grade work without difficulty, their mental maturity does not permit them to mix socially with the members of their class, so that they have little in common with them. They feel themselves too big to associate with those a grade behind them, and those who are with them in class think them too small to be accepted as equals. Rapid promotion also causes our young people to graduate from school so young that they leave home to go to college when they are still children. At best, this is bad, for no institution can take the place of the loving, thoughtful care and guidance of parents.

This experiment, however, is based upon a different idea. It was aimed to enrich the curriculum in such a way that these special promotions were not necessary. The aim was to add to the course of study something that children like to do. It was hoped to give them a more complete development by basing this enrichment on "driving dynamic interests." An effort was made to utilize these interests by providing "life situations" in the school. The clubs were varied to offer an appeal to widely different interests. Work in the clubs gave practice in parliamentary procedure. The clubs were social groups, and participation in them brought out latent qualities of coöperation and teamwork; leadership and

followership were both provided. Opportunity for attempting "real" problems of life was given. Practice in oral discussion was supplied.

There were real intellectual outcomes, also. Children's minds were sharpened by interplay, one against another. Interest in some live practical problem or need stimulated new reading interests. Boys and girls learned by being "blocked" on a real enterprise that one must have adequate information to solve problems, and that one must have thorough mastery of technique when technique is demanded. Work like this taught these children the value of books, made the library a place of real interest, and sent them to the study of their school courses with a more vital interest. Furthermore, such activities as those in the clubs provided for the many interests of boys and girls. Their social abilities, their mechanical aptitudes, and their aesthetic interests and abilities were trained as well as the fundamental verbal intelligence.¹

Another splendid feature was the variety of work that the club idea introduced. Notebooks of various kinds were kept in each club. They were not the kind that are often made in a class, but rather the kind that young people like to make. This meant that the daily newspapers were scanned for material pertaining to teachers, foresters, nurses, and arts and crafts. Daily newspapers were always available and they were in constant use. Each room had its list of magazines. These, too, were widely read to discover material relative to the interest clubs. Clippings, news notes, and editorials were brought to the club meetings. The gathering of these clippings took considerable effort and used much of the spare time. In some of the clubs the notebooks were club affairs, where the club as a whole made one book. In others they were individ-

¹ National Society for the Study of Education: *Twenty-third Yearbook*, pp. 107-108.

ual affairs. In the Salesmanship Club there were a number of individual notebooks, and upon some of them hours and hours of work were put. A large department store gave a prize for the best notebook on salesmanship. The children entered into this contest whole-heartedly.

It took much time and effort to get the books together, and to decide which one was best was no easy task. A letter from the superintendent of the store contained the following paragraphs:

It was rather a difficult matter to award the prize this year because of the good work of all the other contestants who turned in a sales book.

However, we thought that Miss —— should win the prize in view of the greater work required to compile her book and the uniformly good work contained therein.

We wish especially to comment on the sales books of Georgia ——, Ruth ——, Bernice ——, and Wilma ——.

In my own mind this has been the best year in the Salesmanship Club, and proves without doubt that salesmanship as a study can be taught with profit in the lower grades.

The work these young people have done is remarkable.

Sincerely,

The pupils gathered material in many places. Books, magazines, and newspapers were read and articles and advertisements were clipped from them. Advertising folders and cards were collected. Enough material to make a notebook of one hundred pages was collected and classified according to the following list of contents:

"Steps in a Sale"	S. R. Hoover
"Business Creed"	H. R. Ennis
"Pettibone's Coat of Arms"	<i>Pettibone's</i> ¹

¹ A local store.

"Hints for a Good Salesman"	<i>Clerk's Book</i>
"Jessica Revives a Faded Petunia"	<i>American Magazine</i>
"Miscellaneous"	<i>Pettibone's</i>
"Mottoes for Salesmanship"	<i>Pettibone's</i>
"Recharging the Battery of Profit"	<i>Business Magazine</i>
"Credit Union and Business"	<i>Business Magazine</i>
"He Did Extraordinary Things"	<i>American Magazine</i>
"The Salesman's in the Kitchen"	<i>Business Magazine</i>
"Patrick Crowley — Forty-seven Years to the Top"	<i>Business Magazine</i>
"Selling to a Schedule"	<i>Business Magazine</i>
"The Man with One Thousand Partners"	<i>American Magazine</i>
"Advertising"	<i>Pettibone's</i>

The store also gave a prize for the best essay on salesmanship. The club members entered into this contest too. They knew that this institution prizes the people who come to it and that it trains them along right lines. The superintendent of the store said this so frequently that they realized that they were not contending for a new prize but were receiving a training which would make them valuable to such an institution.

The study of salesmanship, together with the practical application of what was learned by planning and executing sales, as well as actual experience in a large store, made the work not only interesting but profitable. Chapter XVI gives further details.

The results achieved by the Newspaper Club were gratifying also. The newspapers afforded practice in writing for a definite purpose. There is something more impelling and exacting in writing an essay for a contest than in writing a composition for class. If one's writing is to appear in print, more care in production is taken. The mechanics of language are found to be necessary. Correct punctuation, spelling,

capitalization, and paragraphing and effective expression of ideas take on a new interest. No child cares to parade his ignorance before the world. One seldom realizes how little he knows until he must put his knowledge before the world for inspection. While preparing for this, the necessity for knowing these mechanics comes to him, and his writing takes on a new life. This opens the way for effective English teaching. The papers conducted a number of essay and story contests. The interest became general. Sometimes a whole class entered a contest and the English department joined forces. This resulted in some surprising productions from people who never before had exhibited a liking for writing. It spurred on the people who had charge of the newspapers and aroused such interest that seldom was there lack of material for publication.

The four girls who ran the first papers went to high school and did very good work. Three of them were on the honor roll for scholastic work. Three of them were on the staff of the high school paper and were dependable, resourceful contributors. Last year one of these girls won the American Legion state essay contest. Another of them occasionally sells her productions to the metropolitan papers and magazines. All of them are growing and gaining strength through their writing.

A number of the activities of the Newspaper Club offered actual business experience. To work up a subscription list for a newspaper is a real undertaking which requires business sense. People are not always ready to buy what one has to sell and unless one is able to convince the prospective buyer that the article is a desirable and worth-while one not much can be accomplished.

In the case of the newspapers it was first the salesmanship of the editors, filled with their enthusiasm for their project, that

sold the idea to their managers. Then it was these managers who sold the idea to the pupils. By so doing, a subscription list of approximately one hundred was worked up. This with the revenue from the advertising space put the newspaper venture on a sound financial basis. To be sure, the financial receipts were not great but, nevertheless, they were just as vital to this project as a large amount of money is to a large business. If goods cannot be sold and money received, a project always fails.

The club work tended to disclose a type of social intelligence for which the classroom makes little provision. The newspapers needed managers. The various club activities needed people to plan and manage them. If the planning and managing were done by the teachers, most of the good would be lost. Accordingly, people from the club membership were drawn upon to do this work. They had to rely upon their own ideas in order to make their projects a success, and in doing this self-confidence was established. As a result the members of the first clubs were the presidents of their classes and managers of activities in the senior high school. They received permanent benefit from the training in leadership that the club work gave them.

The club work provided splendid opportunities for correlation with other subjects. Some of the facts and statistics given in the content material of the clubs served as a basis for graph work in arithmetic. In procuring posters for the advertising of the various sandwich, candy, and peanut sales, the art department was called upon. The posters were made a subject of study. The story contest and essay contest held by the newspapers were at times taken over by the English department, and credit was given for work done in the contests. The content and fiction divisions in the various interest libraries served as source material for reports

in geography, history, composition, and language, as well as book reports for the reading circles. The good effects of the clubs were so commendable and so easily discerned that all the teachers heartily coöperated in the undertaking and were glad to use whatever material it was possible to use in their work.

The eighth grade held regular graduation exercises, a thing which the local educators did not sanction, but which custom demanded. Since the organization of the first clubs they provided much material in the form of essays and stories for these affairs.

Samples of the contributions of the clubs to graduation programs are given in Chapters XI to XVIII. These contributions make no claim to originality. They were written by the children, under the guidance of their teachers, after the children had studied and read widely on their chosen subject.

Some of these productions were more or less surprising. We usually think that a child cannot produce very much, because his ability is usually underestimated. The teacher thinks for him, and when he gives a response that coincides with her thinking he is usually classed as a good student; but due to the fact that someone else does most of his thinking, his production is limited. This is not true when a pupil becomes interested in a subject and is encouraged to produce his own ideas, in concrete form, along his line of interest; it is then found that there is almost no limit to what he can and will do. After listening to one of the discussions listed in Chapter XI at one of the commencement exercises, a woman said, "Isn't it too bad to fill these youngsters' heads so full of knowledge that they talk like grown folks?" The school can scarcely take the credit for filling heads with knowledge, but it can take the credit for helping to find and feed the interest of these children and for helping them to gather knowledge.

On the other hand, there is an important point in the

woman's remark. She had noted a most remarkable characteristic of these graduation exercises, but was unable to interpret it correctly. She saw that there was no halting or forgetting on the part of the speakers. All of them had poise and composure. There was no pallor of the cheek or shaking of the knees. Every speaker went at his job as though he were a missionary or evangelist upon whom rested the entire responsibility of saving the souls of the congregation. The mastery of knowledge was part of the secret, but only a part. Here were children who had learned much because they were on fire with an all-consuming interest in their subjects. They thoroughly believed in the importance of their message. They knew that their knowledge of this all-important subject was more extensive than that of anyone in the audience. They felt that the ignorance of their audience had to be enlightened, and that their parents, brothers, sisters, and friends should live no longer without experiencing an interest in the thing that to them was all-pervasive.

Situations such as these are fraught with potentiality and power. In such a situation Demosthenes conquered a serious speech disability and became the greatest orator of all time. Under similar conditions Cicero thundered forth his tremendous invectives and saved Rome. In such circumstances Julius Caesar stood on a stone in a German forest and transformed his soldiers from despicable cowards to conquering heroes. In such a spirit Joan of Arc led France to victory and Daniel Webster saved our Union. Surely it is fitting and proper and all-important that we should spare no pains in our efforts to bring great moments like these into the lives of our gifted pupils.

PART II
MATERIALS AND METHODS

CHAPTER XI

RADIO CLUB

OUTLINE OF WORK

I. Purpose

- A. To give an opportunity to read an abundance of material along the line of the child's expressed interest
- B. To give as much information about radio from as many sources as possible in order to foster that interest

II. Method

- A. Reading books, newspapers, and magazines
- B. Making experiments
- C. Question-box discussions
- D. Notebooks, clippings
- E. Talks by local radio men

ORDER OF BUSINESS

- I. Call to order
- II. Roll call
- III. Reading of minutes
- IV. Reports of standing committees
- V. Reports of special committees
- VI. Old or unfinished business
- VII. New or unfinished business
- VIII. Program or study hour
- IX. Adjournment

LESSON TOPICS

- I. The Development of Radio
- II. Inventors of Our Modern Methods of Communication
- III. Radio as a Public Service
- IV. Radio for Entertainment
- V. Radio as a Civilizing Agency
- VI. The Use of Radio on the Ocean
- VII. Future Possibilities of Radio
- VIII. Broadcasting Stations
- IX. The Training of a Radio Operator
- X. Radio — A Field of Opportunity
- XI. Transmission of Sound by Radio
- XII. Radio Audiences
- XIII. Radio Photography
- XIV. Radio Construction — Aërial, Detector, etc.
- XV. Radio Construction — Condenser, etc.
- XVI. A Study of Various Receiving Sets
- XVII. A Study of the Morse Code
- XVIII. A Visit to a Broadcasting Station or a Local Radio Shop

WEEKLY REPORTS

Date Jan. 29

1. Plan for next week

Topic: Inventors of Our Modern Methods of Communication — Marconi, Bell, Morse, Edison

2. To-day's aim

To lead group to understand the relation of radio to past and present modes of communication

3. Method

The pupil leader prepared and read the attached paper, which was followed by discussion. The assigned topics for discussion were then taken up.

4. Report of work accomplished

(a) Good questions asked

The club arranged to attend the High School Radio Club meeting open to the public this evening.

(b) Good contributions

Beginning was made toward our library of clippings. Work is to begin on classification next Wednesday evening after school.

(c) Books read and amount of reading done

730 pages reported as read

(d) Report of what was done

Date Feb. 5

1. Plan for next week

Topic: Radio as a Public Service

Leader, Alfred ——

2. To-day's aim

Topic: Inventors of Our Modern Methods of Communication

Leader, Walter ——

3. Method

Study-club method of procedure

4. Report of work accomplished

(a) Good questions asked

See following pages.

(b) Good contributions

(c) Books read and amount of reading done

Five boys read 1460 pages distributed as follows:
408 pages, 295 pages, 91 pages, 121 pages, 545 pages

(d) Report of what was done

Date Feb. 13

1. Plan for next week

Topic: Radio for Entertainment

Leader, Carleton —

2. To-day's aim

To give the members of the Club training in the use of the *Readers' Guide* and to give opportunity for them to use the many articles on radio found in current magazines

3. Method

A trip to the city library, where Miss — instructed them in the use of the magazines in the reference room

4. Report of work accomplished

(a) Good questions asked

See following sheet.

(b) Good contributions

See following sheet.

(c) Books read and amount of reading done

Will report next week

Date Feb. 19

1. Plan for next week

Topic: Radio as a Civilizing Agency

2. To-day's aim

Topic: Radio for Entertainment

Leader, Carleton —

3. Method

Topic presented by Carleton —. Discussion of topics as outlined was followed.

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

Three boys reported as follows : 220 pages, 210 pages,
52 pages

(d) Report of what was done

Date Feb. 26

1. Plan for next week

Topic : The Use of Radio on the Ocean

2. To-day's aim

Topic : Radio as a Civilizing Agency

3. Method

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

It was suggested that an attempt be made to listen in
on the inauguration ceremony March 4.

(c) Books read and amount of reading done

(d) Report of what was done

The boys brought an electric transformer, a spark
coil, and a key, connected them, and practiced send-
ing by International code.

Date March 6

1. Plan for next week

Topic : Future Possibilities of Radio

2. To-day's aim

Topic : The Use of Radio on the Ocean

3. Method

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

The boys continued their study of the International code.

(c) Books read and amount of reading done

Four boys reported reading as follows: 1017 pages, 270 pages, 338 pages, 248 pages

(d) Report of what was done

Date March 13

1. Plan for next week

Topic: Broadcasting Stations

2. To-day's aim

Topic: Future Possibilities of Radio

3. Method

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

(d) Report of what was done

Date March 20

1. Plan for next week

Topic: The Training of a Radio Operator

2. To-day's aim

Topic: Broadcasting Stations

3. Method

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

(d) Report of what was done

SAMPLES OF THE CLUB MINUTES

Meeting for January 22

Meeting was called to order by Miss —— at 11:00 o'clock.

The leader told us what our aims were for this year, and when we needed references how and where to get them. We were given our study books, and the leader explained everything in them. We proceeded to elect our officers. Nominations were open for chairman. Alfred —— was elected. Norman —— was elected secretary. We elected a critic and it came to a tie between Carleton —— and Arthur ——. Motion was made and seconded that we cast a unanimous ballot for Arthur ——. Motion was carried. We then received our reference books. Meeting was adjourned at 11:45.

Meeting for February 26

The last meeting was not a business session, but an experimental session, which was started at 11:00 o'clock. We received our reference books and made additions to our study books.

The experiment was rigged up, which consisted of a key, spark coil, transformer, and wire. It worked and each boy had a turn at the key and sent code. The rest of the boys made out what it was. We kept at this until our time was up.

We asked the leader if we could have a set up on March 4 to hear the President give his address. She said we might if the chairman had the consent of Mr. —— and if we could get a set. The chairman said he would try to get one, and that the upper grades might listen in. Meeting adjourned at 11:45.

Meeting for March 12

Meeting was called to order by the chairman at 11:00 o'clock. He took the roll, all were present but two. Then Walter

—— read his topic. Then we discussed questions for lessons 5, 6, and 7, after which Carleton —— read part of the topic "Radio in the Wilderness," which was printed in *Popular Mechanics*. And then Walter took his turn reading and read till the time was up. Meeting adjourned at 11:45.

Meeting for March 19

We received our reference books. Meeting was called to order by Alfred —— at 11:05 A.M. Minutes of last meeting were read by the secretary. Minutes were approved. Roll call was taken. Two new members were added. All were present but one. We distributed topic books among the pupils and we made additions to our study books.

Alfred —— gave his topic, "Broadcasting Stations."

OUTLINE OF STUDY

Jan. 29

I. The Development of Radio

A. Topics for discussion

1. Name the important means of communication in use to-day.
2. How do these differ from those in use three hundred years ago?
3. When was the telegraph invented?
4. When was it first put to practical use?
5. What effect has it upon the success of radio to-day?
6. When was the telephone invented?
7. When did it come into general use?
8. Tell how extensively it is used to-day.
9. Tell about the use of ocean cables.
10. Give the number and location of the principal ones.

11. To what extent has radio revolutionized past methods of communication?
12. Does radio offer a possible means of communication with the near-by planets? Discuss.

B. References

1. Hogan, John V. L.: *The Outline of Radio*, pp. 1-25
2. O'Shea, M. V. (editor-in-chief): *The World Book Encyclopedia*, Vol. 9, pp. 5935-5968
3. *The World Almanac*, 1924, pp. 693-694

II. Inventors of Our Modern Methods of Communication

A. Topics for discussion

1. Should Marconi be given entire credit for the invention?
2. Just what were the difficulties that needed to be overcome?
3. What additional ideas have been added to the original ones presented by Marconi?
4. Why is radio considered superior to other methods of communication?
5. Just how badly would radio communication be handicapped to-day without the invention of the telephone?
6. Just what use is being made of Morse's invention of the telegraph code?
7. Why is a knowledge of the Morse code desirable?

B. References

1. Marconi, Guglielmo
 - (a) O'Shea, M. V. (editor-in-chief): *The World Book Encyclopedia*, Vol. 7, pp. 4287-4288
 - (b) Parkman, Mary R.: *Conquests of Invention*
 - (c) Sanford, C. M., and Owen, G. A.: *Modern Europeans*, pp. 195-202

2. Bell, Alexander Graham
 - (a) O'Shea, M. V. (editor-in-chief) : *The World Book Encyclopedia*, Vol. 2, p. 703
 - (b) Parkman, Mary R. : *Conquests of Invention*
 - (c) Sanford, C. M., and Owen, G. A. : *Modern Americans*, pp. 29-35
3. Morse, Samuel F. B.
 - (a) O'Shea, M. V. (editor-in-chief) : *The World Book Encyclopedia*, Vol. 8, p. 4664
 - (b) Parkman, Mary R. : *Conquests of Invention*
4. Edison, Thomas
 - (a) Meadowcroft, W. H. : *Boy's Life of Edison*
 - (b) O'Shea, M. V. (editor-in-chief) : *The World Book Encyclopedia*, Vol. 4, pp. 2108-2110
 - (c) Parkman, Mary R. : *Conquests of Invention*
 - (d) Sanford, C. M., and Owen, G. A. : *Modern Americans*, pp. 17-27

III. Radio as a Public Service

A. Topics for discussion

1. What is radio doing for the home life of the country?
2. How does its influence differ from that of the automobile and the movie?
3. What control have we over radio programs that we have not over movie programs?
4. Just what is radio doing for human life upon the ocean?
5. How are farmers benefited by radio?
6. Of what value is it to remote sections of the country?
7. Of what value is it educationally?
8. How can its use as a "public service" be improved?

B. References

1. Hogan, John V. L.: *The Outline of Radio*, pp. 187-205

IV. Radio for Entertainment

A. Topics for discussion

1. Mention the different kinds of programs broadcast.
2. What kind of program do you like best?
3. In what way might the programs be improved?
4. Why do not all our artists broadcast programs?
5. Will programs for entertainment continue to hold the important place they now have?

B. References

1. "Broadcasting and the Public Interest," *Independent*, March 29, 1924
2. "Broadcasting a Music Program across the Atlantic," *Current Opinion*, March, 1924
3. "How Shall We Get Great Artists to Broadcast?" *Radio Broadcast*, May, 1924
4. "Drama by Radio," *Living Age*, March 1, 1924
5. "Plays by Radio," *Literary Digest*, May 17, 1924
6. "Broadcasting and Literature," *Century*, March, 1924

V. Radio as a Civilizing Agency

A. Topics for discussion

1. What is meant by civilization?
2. What are the characteristics of a civilized community? A civilized person?
3. Are there any uncivilized groups or uncivilized individuals within the country? Describe them.
4. What is radio doing to improve conditions?

5. In what way might radio be used more effectively as a civilizing agency?

B. References

1. See *Readers' Guide*.

VI. The Use of Radio on the Ocean

A. Topics for discussion

1. What is meant by "ship-and-shore" communication?
2. State its importance.
3. What is the reaction of the radio world to the SOS call?
4. What other use is made of radio besides "insuring the safety of life" at sea?
5. Of what importance is it to a ship as a help in finding its position?
6. Just what use does the Navy make of radio?

B. References

1. Collins, Francis A.: *The Wireless Man*
2. Hogan, John V. L.: *The Outline of Radio*, pp. 192-199
3. Low, A. M.: *Wireless Possibilities*
4. O'Shea, M. V. (editor-in-chief): *The World Book Encyclopedia*, Vol. 9, pp. 5935-5968
5. See *Readers' Guide*.

VII. Future Possibilities of Radio

A. Topics for discussion

1. What use may be made of it in future wars?
2. What are its possibilities in connection with future wars?
3. What are its possibilities educationally?
4. What has been done and what are the future possibilities in treating remote cases of disease or sickness?

5. Just how may it be used to control crime — to detect and bring criminals to justice?
6. How may it benefit future exploration?
7. Wireless transmission of power is a future possibility. Give examples of its possible use.

B. References

1. Collins, Francis A.: *The Wireless Man*, pp. 147-177
2. Hogan, John V. L.: *The Outline of Radio*, pp. 206-220
3. Low, A. M.: *Wireless Possibilities*
4. See *Readers' Guide*.

VIII. Broadcasting Stations

A. Topics for discussion

1. Describe a broadcasting station.
2. Mention some of the largest broadcasting stations in the world.
3. Name several in Wisconsin.
4. Why is it necessary to have laws governing broadcasting stations?
5. Why are there differences in wave lengths?
6. Explain the use of "relay stations."

B. References

1. Collins, A. Frederick: *The Book of Wireless*, pp. 1-11
2. Collins, Francis A.: *The Wireless Man*
3. Hogan, John V. L.: *The Outline of Radio*, pp. 24-226
4. Verrill, A. Hyatt: *The Home Radio*, pp. 131-139
5. See *Readers' Guide*.

RADIO CLUB INTEREST LIBRARY

Books from the Wisconsin Free Library Commission

1. Babson, Roger W.: *What Is Success?* Fleming H. Revell and Company
2. Collins, A. Frederick: *The Book of Wireless*, D. Appleton and Company
3. Hogan, John V. L.: *The Outline of Radio*, Little, Brown and Company
4. Richards, Claude: *The Man of Tomorrow*, Thomas Y. Crowell Company
5. Rolt-Wheeler, Francis: *The Boy with the Inventors*, Lothrop, Lee and Shepard Company
6. Snodgrass, R. T., and Camp, V. F.: *Radio Receiving for Beginners*, The Macmillan Company

Other Books

1. Bachman, Frank P.: *Great Inventors and Their Inventions*, American Book Company
2. Carrington, Hereward: *The Boy's Book of Magic*, Dodd, Mead and Company
3. Collins, Francis A.: *The Wireless Man*, Grosset and Dunlap
4. Gibson, C. R.: *Our Good Slave Electricity*, J. B. Lippincott Company
5. Hagedorn, Herman: *The Boy's Life of Theodore Roosevelt*, Harper and Brothers
6. Lange, D.: *On the Trail of the Sioux*, Lothrop, Lee and Shepard Company
7. Meadowcroft, W. H.: *Boy's Life of Edison*, Harper and Brothers
8. Mowry, W. A., and Mowry, A. M.: *American Inventions and Their Inventors*, Silver, Burdett and Company
9. O'Shea, M. V. (editor-in-chief), *The World Book Encyclopedia*, Vol. 9, W. F. Quarrie and Company

10. Seaman, Augusta: *Jacqueline of the Carrier Pigeons*, The Macmillan Company
11. Spyri, Johanna: *Heidi*, Grosset and Dunlap
12. Tarkington, Booth: *Penrod*, Grosset and Dunlap
13. Verne, Jules: *Twenty Thousand Leagues under the Sea*, The Macmillan Company

Radio Club Reading List

1. Bassett, Sara W.: *Walter and the Wireless*, Little, Brown and Company
2. Hogan, John V. L.: *The Outline of Radio*, Little, Brown and Company
3. Low, A. M.: *Wireless Possibilities*, E. P. Dutton and Company
4. Perry, L. D.: *Construction of Radio Receiving Sets*, Bruce Publishing Company
5. Rolt-Wheeler, Francis: *The Boy and the U. S. Radio*, Lothrop, Lee and Shepard Company
6. Spyri, Johanna: *Jorli*, Grosset and Dunlap
7. Verrill, A. Hyatt: *The Home Radio*, Harper and Brothers

PAPERS CONTRIBUTED BY THE MEMBERS OF THE RADIO CLUB

The Development of Radio

In outlining the growth of radio one hardly knows where best to begin. It does not seem worth while to go back of the first electrical methods of signaling. We have all heard or seen (or perhaps experimented with) many of the crude schemes which some writers have called "wireless telegraphy." Waving lanterns at night or flags by day; blowing whistles according to some code dependent upon the number and length of the blasts; striking stones together under the surface of a lake and listening to the sound transmitted through the water; building huge fires visible from one mountain top to another, — all of these ancient plans are, in a sense, wireless telegraphy.

They are forms of signaling over substantial distances by the use of arbitrary codes, and they do not use wires connecting the transmitting and receiving points. They are not, however, in the least suggestive of radio, and they do not even involve electrical effects. Certainly they contribute nothing to the growth of radio.

Let us, then, begin with the first electrical arrangement for wireless telegraphy. It was not long before Samuel F. B. Morse transmitted (May 24, 1844) his famous first message, "What hath God wrought," over the experimental telegraph wire line from Washington to Baltimore, indeed, quite soon after he built his earliest wire telegraph — that he began trying to telegraph without complete wire circuits. In 1842 he succeeded in sending a message across a canal at Washington using the slight conducting power of the water to carry the electric telegraph current from one side to the other. The same plan was followed and tried out by others in the decade following; but although distances of nearly one mile were covered by the use of large amounts of power, it seems never to have passed beyond the experimental stage.

More than thirty years later, 1875, Alexander Graham Bell built his first telephone. This surprisingly sensitive instrument could reproduce musical signal sounds from comparatively feeble currents of electricity, and was in many ways far superior to the receivers used by earlier investigators of the telegraph. John Trowbridge, of Harvard University, in 1880 applied the Bell telephone to the study of Morse's scheme of wireless telegraphy by diffused electrical conduction through rivers or moist earth. He found that if he interrupted the signaling current rapidly, so that its variations could produce a musical tone, messages could be transmitted through earth or water much more effectively than Morse had thought possible. In 1882 Bell succeeded in sending messages about a mile and a

half to a boat on the Potomac River, using his telephone receiver connected to plates submerged below the water surface.

Developments in England. With Trowbridge and Bell, Sir William H. Preece applied to wireless signaling his knowledge of "cross talk" between neighboring circuits carrying telephone and telegraph messages by wire. Perhaps his first practical installation was that between Hampshire, England, and the Isle of Wight when in 1882 the submarine cable across the Solent (averaging a little over one mile in width) broke down. Preece got good results in the same way as did Morse and Bell. Preece also experimented with the magnetic effects between circuits having no interconnection by wire, earth, or water; and with the assistance of A. W. Heaviside succeeded in transmitting both telegraph and telephone messages by wireless in this way as early as 1885. However, by combining the two arrangements and taking advantage of both magnetic induction between the circuits and diffused conduction between their terminals, he was able to increase working distances to more than six miles.

This magnetic induction between completely closed circuits was only one of the actions suggested for, and practically applied to, electric signaling without connection wires, during these early years. In 1885 Thomas A. Edison and his associates devised a different sort of wireless telegraph, which bore a closer resemblance to the radio of to-day. Edison's proposal was to support, high above the earth's surface and at some distance from each other, two metallic plates. At the sending station one of these was connected to earth through a coil that would produce a high electrical pressure; the other, at the receiving station, was connected through a Bell telephone to the ground. In operation, the intense electric strains produced in space about the sending plate (by reason of the high

voltage) were supposed to extend outward as far as the receiving plate and to produce currents of sufficient strength to give signal tones from the telephone. A modification of this system, by which the receiving plate was mounted on the roof of a railway car and the telegraph wires beside the tracks were utilized to help out the transmission, was used on the Lehigh Valley Railroad in 1887. It operated satisfactorily, and this was probably the first instance on record of telegraphing to a moving train. . . .

All these plans were utterly eclipsed soon after by Marconi's experimental demonstration of electric wave telegraphy in 1896 and 1897. The new wireless art quickly gained an importance so great that it required a characteristic name to distinguish it from the earlier conduction systems. The name given to it was "radio communication."

Marconi, who is justly called the inventor of radio telegraphy, was a pupil of Righi's. He applied himself to the building of a sensitive and, for those days, dependable device that would receive and record a message in dots and dashes of the Morse code. Such a receiver was made, and, having come to England, Marconi carried on the famous Salisbury Plain demonstration in 1896. There he telegraphed a distance of nearly two miles.

Before the end of the next year (1897) Marconi had sent radio messages to and from ships at sea over distances as great as ten miles. On land he could send and receive at a distance of twenty-four miles. The earlier systems of wireless were never capable of such results as these.

In the quarter-century that has passed since Marconi sent the first messages by radio, the complexion of the art has changed in great measure.

In 1902 Fessenden invented the radio-frequency alternator. In 1906 he had built generators, with the assistance of

E. F. W. Alexanderson, capable of transmitting messages several hundreds of miles.

In 1912 vacuum tubes could be used to transmit for only a few miles, whereas now they are producing in units rivaling the huge alternators of the trans-Atlantic radio stations.

In 1903 Fessenden brought forward his liquid receiver, which had such great responsiveness and stability that it came and was generally adopted in the U. S. Navy's standard of sensitiveness.

In 1906 and 1907 de Forest introduced the grid audion, which proved to be substantial. This vacuum tube detector showed great sensitiveness from the very first. It was not accepted practically until about 1912. The vacuum tube took the place of the other receivers at stations where extreme sensitiveness is desired.

The only way they sent messages was by the Morse code, or "dot and dash." Voice transmission was not proposed until Fessenden in 1902 suggested that his continuous wave method of transmission was suitable for radio-telephony. Fessenden could communicate from his station at Brant Rock with New York, 200 miles, and Washington, 500 miles.

From 1907 to 1912, radio-telegraphy developed slowly.

By 1915, the engineers had succeeded in talking by radio from the huge naval station at Arlington, Virginia, to Paris, and in the opposite direction to Honolulu. This great experimental feat was accomplished by using vacuum tubes as oscillators and voice magnifiers.

After Marconi's demonstration in 1897, a number of commercial installations were made on both ship and shore. January 23, 1909, was the date of the collision between the steamships *Florida* and *Republic*, which was reported to neighboring ships by radio in time to save all passengers and crew of

the *Republic* before she sank. In 1910 messages were heard at distances at 6500 miles.

On the morning of April 15, 1912, over seven hundred passengers of the *S. S. Titanic* were rescued through the aid of radio when the vessel was sunk by striking an iceberg. In the next year messages were successfully received on moving trains.

Commercial service between the U. S. and Japan was begun in 1916, but development of American-European commercial communication was prevented by the World War until after the armistic was signed. In 1919 and 1920 messages were sent from planes. In 1922 the world saw the opening and commercial use of the large plant at Port Jefferson, Long Island.

There are hundreds of broadcasting stations and millions of listeners throughout the United States.

Radio is here and is doing valuable work.

Samuel Morse

Samuel Morse was born on April 27, 1791, a year after the death of Benjamin Franklin.

In the early part of his life, Morse was a noted artist and studied abroad. But I am not going to tell much of his early life because we are interested in the part of his life where he was classified as an inventor.

One time when he was at a meeting one of the professors who had been over to Europe and studied electricity there said that if one would put electricity into a wire it would travel miles a second. When Morse heard this he got to thinking and then asked, "Why could one not send messages in the same way and at the same speed by means of electricity?" But no one in the meeting answered this question, partly because they did not know the answer and partly because they wondered what an artist knew about electricity, but they had

a great surprise in store for them. When the meeting was over Morse went home. On the way a friend saw him from across the street and said, "Hello there, Morse," but Morse did not hear him because he was busy thinking how he could send messages over a wire no matter how long it was.

First he knew that a code was necessary, and secondly he knew that a machine which could send a message was needed. He went to work and constructed a code, which was properly called "The Morse Code," and a telegraph instrument. He was not, as you may suppose, the only one to try along this line because there were many others over in England and Germany, but they were led off into all sorts of bypaths.

He was well acquainted with the basic principles involved in this kind of work.

1. He knew that a coil of wire in the shape of a horseshoe could be magnetized by the passage of a galvanic current, and that it would lose its magnetism when the current was broken.

2. He knew that this electromagnet could be made to lift and drop masses of iron of considerable weight.

3. He knew that the galvanic current could be transmitted through wire of considerable length.

And with these three principles in mind he took a step farther, holding that the opening and closing of the current could be made, through an electromagnet, to give a definite up and down motion to a lever pen. This pen, alternately dropping and rising at regulated intervals from a tape of paper, should cause the current not only to signal but also to record the message.

But when he had this all planned out he did not know where the money was going to come from so he could show the plan to the people and get a patent on it.

One day a man, Alfred Vail, came to him and offered to

finance the project for him, if he would give him a fair share in the enterprise. Morse accepted the offer and they got busy and made the articles necessary to complete a set which would send as well as receive. This was done in Vail's father's machine shop. When the day came to send a message over the wires Vail's father wrote on a slip of paper and handed it to Vail to send to Morse, and almost instantly Morse rushed into the other room saying that the message was, "A patient waiter is no loser." And this proved that messages could be sent over wires of any length.

Alexander Bell

Bell was born about 1819.

In Bell's younger days, he and his friend made a dummy of wood and cloth talk, so now when he was older he said to a man by the name of Watson, "Why can we not make a sort of transmitter through which we may talk to a person on the other side of the wire no matter how long it is?" So Bell got to work and studied until one day he called Watson to come to his office. He had something to tell him, so when Watson came he was surprised to see all kinds of wires strung back and forth in his office. Then Bell persuaded Watson to go into another room, where he found a cone-shaped black ear phone on one of the desks. He held this up to his ear and listened, and he heard a voice saying, "Watson, come here, I want you," and immediately Watson knew it was Bell talking. So he rushed into Bell's office saying, "I heard you and it proves to me that one can talk to another person over any length of wire."

Guglielmo Marconi

Guglielmo Marconi was born in 1874 in Villa Griffone near Bologna, Italy.

Marconi's particular hobby from the time he was eleven years old was electricity.

While he was at the University of Bologna he came face to face with his problem, and knew that he would never give up until he had found a solution. His work under Professor Righi gave him the key to his door of opportunity, for Professor Righi was a follower of the German scientists Helmholtz and Hertz, and knew all about the outposts of discovery that their achievements had won.

"It was while Hertz was demonstrating with a Leyden jar and two flat coils of wire, at the technical high school in Carlsruhe, just as I am working before you now," declared Righi, one day, "that he came upon his great idea. He noticed that the discharge of electricity from a small jar through one of the coils would induce a current in the other coil if there was a gap in the inducing coil. For the spark caused when the current jumps the gap set up electrical vibrations that gave rise to powerful currents in the neighboring wire. He soon determined that these currents were noticeable even though the coils were far apart. It was clear to him then that one might send out electrical waves without wires."

From the time Marconi was sixteen he thought of the fact that it might be possible to send wireless signals. Marconi knew that people working on a telephone receiver near a telegraph wire had distinctly heard music from a neighboring wire that was being used to test Edison's musical telephone. The sounds had leaped in some way across the gap to the telephone on the other line, and he knew that Edison, in 1885, had made use of these induced currents to signal to a moving train from a wire near the railway.

When Marconi was twenty-one he had succeeded in sending signals over a distance of a mile. Noticing one day that an

instrument on the opposite side of a hill was affected, he knew then that the waves had penetrated solid rock. "Surely then," he said to himself, "there is no limit to the distance over which messages may be sent. In order to make the waves work over greater distances, I must have a more sensitive receiver, which would register the dots and dashes clearly to the listener."

In 1896 Marconi applied for a patent in England, at the same time submitting his plans to the postal telegraph authorities, and later on he found out that the higher the stations the greater the range.

At Poldhu on the coast of England, a station was established with a group of twenty poles for the aerial. Huge power driven dynamos furnished the electric currents and converters took the place of the induction coils of the early experiments. At Cape Cod, Massachusetts, another station was erected with powerful machinery for receiving signals from the station at Poldhu. Storms had done a great deal of damage to the masts at both stations before the stations were completed, but Marconi, unwilling to wait for them to be fully restored and the station completed, determined a trial from Signal Hill near St. Johns, Newfoundland, which was some six hundred miles nearer Poldhu than the other station.

Thursday, December 12, 1901, was the great day when the first wireless message crossed the ocean. "At three o'clock December 12, start sending a simple message, let it be the three dots of the S," were the instructions given by Marconi to the other station, "and keep sending it at intervals till six o'clock."

As Marconi was seated at his apparatus he heard three short ticks resound in his ear phones, and he listened again and three more ticks were heard, and then he called his assistant

to see if he heard them, too. So this proved that man had learned to use the wings of light.

Radio as a Public Service

Public utilities are often considered to include only those organizations that supply some specialized service to the people at large and demand compensation in return. Thus, gas and electric companies furnishing light, heat, and power are public utilities in this narrow sense; so also are telegraph, telephone, and radio companies that transmit messages for pay. In a broader sense, however, the phrase may be applied to any activity that is of utility to the public generally. Radio is in this sense a public utility, for beyond its purely commercial use in furnishing communication that may be sold it is daily performing other and vast service. The value of such a service as radio, reaching thousands of people who are isolated in the country or shut in within the sick room, may well be imagined.

One of the first practical applications of radio-telegraphy was to "ship and shore communication," and this branch is probably in many ways the most important. Without radio, a vessel on the high seas can have no way of signaling to shore or to distant ships.

Coastal radio telegraph stations have been erected at or near most of the seaports all over the world, and the great majority of these stations are kept open night and day to make life as safe as possible at sea.

Another service radio gave to a sick man about 800 miles out at sea. The captain had taken sick. There was nothing on the ship to take care of him but a radio set and a medical cabinet. The wireless operator examined and then gazed into a medical book. Finally he found the prescription ordering a dose of No. 15. Fifteen happened to be empty. . . .

The wireless operator set to work sending SOS, hoping it

might reach some ship with a doctor on board. The first ship to pick up the call was the *Merida* off the coast of Florida. The wireless operator rushed into the doctor's cabin and said, "There is a man very sick with ptomaine poisoning." "Which stateroom?" was the quick reply. "He's about 800 miles from here." The doctor was unaccustomed to such long-distance practice, but the training of his lifetime enabled him to grasp the problem instantly. "Let me have an aerogram blank quick." The prescription was soon written, with explicit directions, and a few minutes after the operator was treating the sick man. After a few days the captain was back at his post.

Radio is of value to all parts of the country. Captain MacMillan would have been lost on his Arctic expedition had it not been for radio.

The round-the-world fliers would have been lost to the knowledge of the outside world had it not been for radio. As it was they were in constant communication with some broadcasting station at all times.

We have control over radio where we haven't over movies and other kinds of entertainment. We may go to some high-priced show house or auditorium and pay two fifty or three dollars a seat to see an opera. Maybe two or three nights after the same opera may be broadcasted. The same thing is true about famous bands or orchestras that may be broadcasted free to listeners, yet it costs hundreds of dollars for the station to broadcast the program.

Radio helps life on the sea by helping people pass away the time. Many times there are radio dances, which all of the people take part in. Every half hour the people get the latest news bulletins from K. Y. W. On most of the big ocean liners there is a newspaper in which all of the news is furnished by radio.

The farmers are benefited by radio by getting the latest news, weather reports, grain and stock reports, besides all of the musical programs. During the summer when radio is not so good the farmers are also busy working in the fields. After supper when all of the chores are done they sit down and get a program that they like. Before radio came into use the farmer sat around the fire and read.

Radio public service can be improved by having not more than three stations on the same wave length. Radio stations can improve the public service by all of them coöperating and having certain nights for certain programs, such as some stations have at the present time. Many stations now have Monday night set aside for speeches, and Saturday for dance music.

Radio as a Means of Entertaining

Radio can be used for many purposes besides government use. It can be used for entertainment. Every evening there are bedtime stories for children and dramas and music for older people. There also are sermons on Sundays. Many radio stations have definite days of the week set aside for a certain thing. For instance, one day of the week would be for dance music, another day for music from some theatre, and still another day for a radio drama. Every radio fan that has had a set for some time knows these different days and so can pick his program for the evening to suit himself.

There are always new things being thought up by the radio stations which they think will please their listeners. Some time ago one of the well-known stations celebrated the anniversary of their station by having an all-night program, lasting from six o'clock in the evening until six o'clock the next morning. Things like this interest the people on account of their novelty and so they will listen to that particular station.

If one station can put on a better program than another they will get the people to listen to it. This is just the way it is, because each station tries to secure the attention of the listener and this tends toward competition and better programs.

The Use of Radio on the Ocean

One of the first practical applications of radio telegraphy was to "ship and shore communication," and this branch is probably in many ways the most important. Without radio, a vessel on the seas can have no way of signaling to shore or to distant ships. To-day the leading nations have a law which requires their large vessels to carry effective radio outfits, simply as a matter of protecting the lives of passengers and crews.

The radio-telegraph stations on land have been erected at or near seaports all over the world, and most of these stations are kept open night and day for exchanging messages with ships at sea. These plants and most of the ship installations have a working radius of more than 250 miles. Some ship and land stations have sets to work across the Atlantic. Many passenger ships keep in contact with shore during their trip.

In times of emergency, however, the signal SOS is sent out and immediately receives the right of way. All message traffic not relating to the distress condition is forthwith held up, and every radio operator within range bends his energies toward aiding the signaling vessel.

The Future of the Radio

What is radio coming to? In another ten years or in fifty years, we shall be able to receive in our homes not only the music but will be able to see the whole opera performance. Will it be possible for us just to press a combination of buttons on a control box and instantly be put in telephonic communi-

cation with some one no matter where? If there are beings on other planets may we be able to speak with them? Can we hope to drive aeroplanes by generating on earth power enough to drive them at unheard of speeds by transmitting it through radio? Nobody knows the answers to any of these questions.

Radio for communication and signaling offers many possibilities. It has already been used for sending telegraphic messages between moving trains and fixed stations; and there is nothing to prevent installing outfits that will enable a passenger on one train to talk with a friend on another train. Radio will permit the delivery of orders to the engineers without requiring them to stop their trains.

So let us rest. We have found out something about what radio is accomplishing for the world, and about how that work is done. We have looked forward a bit, to see what we may reasonably expect of radio in the next decade or two.

The Use of Radio on the Ocean

One of the recent contributions that radio has made toward the safety of ships at sea is a position determining system. The governments of several large nations have put up, near various channel entrances or at other points in navigation, sets of "radio compass" stations. These installations are usually made in groups of three, interconnected by wire lines, each station being equipped with a loop antennae receiver, which may be used to determine the direction along which arriving radio waves travel. When a ship at sea calls for a position report each of the three direction-finding stations at the same time locates the level along which it receives the signal waves. This information is forwarded over the telegraph lines to a control station, where the three direction readings are transferred to a chart. By the intersection of the lines of wave travel, the position of the ship is found on the chart, noted in

latitude and longitude, and sent by radio from the control station to the master of the vessel. The navigator of any radio equipped ship can quickly learn his position at sea, provided only that he is in the range of a set of radio compass stations. Vessels as much as 150 miles from shore are frequently aided in this way, though the accuracy of location increases as the shore is approached.

Another system is used to assist ships to find their position. This is an inversion of the compass station scheme above described, and uses three "radio beacon" stations in each set. A radio beacon is a transmitting set which sends out signals continuously during foul weather. Each station differs from the others of its set. For example, one may signal groups of three dots; another, pairs of dots, and the third, single dots. Using an ordinary receiver, one cannot gain much from the radio beacons; but if a vessel is fitted with a good loop antennae receiver, the operator can quickly determine the direction in which the beacons lie. By drawing lines on a map in the correct direction from each station, he can locate his ship's position at the intersection point.

The beacon method gives quicker results than does the radio compass plan, but it is of course subject to the individual errors that may be made aboard the ship. According to either system, only two stations are necessary but the third bearing is valuable as a confirmation. If the three lines cross at a single point, the location is very definitely fixed. If they do not coincide, it becomes evident that an error has been made, and the measurements may be repeated.

Naval uses of radio quite naturally are even more extensive than those of the military service. Electro-magnetic waves constitute the only reliable means of transmitting orders to and from warcraft at sea; and the navy departments of most nations have developed extensive communication

chains, so that messages may be interchanged with ships thousands of miles away. Small radio sets are used for landing parties, and for communication between vessels traveling in fleet formation. It has been necessary to develop low-powered outfits that can be operated without disturbing the long-distance communication between a flagship and the coast. Radio signaling to and from submarines has also been worked out. To-day nearly every naval vessel, from a tiny sub-chaser to a super-dreadnaught, carries its radio equipment.

Broadcasting

On July 31, 1924, Davy Jones went fifty feet below the sea at Atlantic City, N. J., to attempt broadcasting below the sea. He began to tell what he saw and fifteen minutes later he came up and was told that he was heard in Illinois.

The broadcasting outfit was all in a rubber sponge in the top of his helmet. It included a close contact electric microphone embedded in sponge, and connected to Radio Station W. I. P. by waterproof wire. After he started talking, his speech was sent 60 miles to Philadelphia, where the broadcasting station is and where there are amplifying panels. It was then sent to New York City by telephone. . . .

Possibly the finest demonstration of radio was given during the national presidential campaign, when people all over the United States listened in on their own radios to all of their candidates giving their speeches without paying a penny for train fare, or hotel bills, or any discomforts in the convention hall. Radio users are now listening to every state or national program. Radio has been lifted from the bottom to the top of entertainment, and undoubtedly is the greatest news carrier of the day. There are more than 600 broadcasting stations in the United States to-day, built and operated for giving out news,

entertainment, instruction and religious programs for the public. . . .

The broadcasting plant consists of a generating plant, amplifying panels, transmitting panels, large antennae, and sensitive microphones, which pick up every sound. The generating plant is capable of generating high voltage, and high frequency currents quite different from those used in the homes for lighting. The announcer stands in a sound-proof room before the microphone, which picks up every little sound. The sound is sent into the antennae in the form of electrical waves, and then out into the air. The electrical waves travel 186,000 miles per second, and are picked up by antennae and made audible by a receiving set. The waves travel faster in the winter than in summer and faster at night than in the daytime. No matter how good a receiving set is it can record only what it actually receives. This is why one hears better at night than daytimes and better in winter than in summer. The antennae system is costly and usually consists of two towers of fabricated steel 100-175 feet in height, located on tops of buildings or on the ground with wire between. Many stations have special wires stretched to football fields with microphones with which to broadcast the games.

Uses and Possibilities of Radio

We are often wont to hear at the present time the remark made that radio is but a fad, and that while the public has gone wild about everything connected with radio, it will soon wear off, like other fads. That radio is not a fad but, on the contrary, it is here to stay permanently and grow into undreamt of proportions can be easily proven in a dozen different ways.

Let us consider some of the practical uses of radio at the present time.

The importance of radio to the rural population of the

country is the dominant note at the Radio Telephone Conference now in session at Washington. It is considered that radio makes the isolation of the farm a thing of the past but brings quickly to the farmer the agricultural information needed in the intelligent conduct of the farm business.

The broadcasting of weather, crop, and market reports is the most important use to which radio is now being put in the opinion of various radio experts attending the conference.

There are more than 32,000,000 people on the farms, composing nearly one-third of the total population of the United States. Most of these people are located where they are practically cut off from immediate contact with the outside world. The radio is the only means of getting to them quickly at small cost the economic information necessary in the proper conduct of their business.

Daily market reports on live stock, grain, cotton, hay, feed, fruit, and vegetables are broadcasted over the whole United States and farmers listen in or get these reports with the help of amateurs. A number of state bureaus and agricultural colleges also broadcast local and national market and crop reports. . . .

The time in dispatching weather, crop, and market reports is a big factor affecting the value of such reports. In cutting hay or harvesting grain, for example, an hour's delay in the dispatch of weather reports may mean a loss of several thousand dollars. An early morning report on the market conditions and estimated receipts at the market that day is of great value to the live stock growers about to ship a carload of hogs to market. Prompt daily reports on fruit and vegetables enable the farmer to determine when and where farm products are most needed and to arrange his shipments accordingly. A sudden frost may kill an entire fruit crop.

By radio, warnings of severe temperature changes or of storms may be flashed to an entire district.

When thousands of tons of food products are threatened by a sudden storm or flood the ordinary forms of communication would be too slow. Market news, to be of any importance, should be received immediately. Radio is the way to do this.

Now let us note the application of radio to ships, trains, and airplanes.

Ship owners, radio operators, government departments and others are giving much attention to the importance of providing on shipboard radio direction-finding equipment by means of which the position of a ship may be quickly and accurately determined. This matter is receiving attention abroad as well as in the United States. This equipment is valuable in that it enables a ship to enter port on all nights while before if it were foggy it had to stay out, or go in at its own risk, because it did not know its position.

In case of a wreck, this equipment may save many lives.

Sound and visual signals have been employed for many years as aids to navigation. Lighthouses and lightships with their characteristic light flashes and sound signals are established and maintained along the coasts in harbor entrances but during a fog lights cannot be seen nor sounds heard; so these do not give a reliable service.

The radio direction-finder is not affected by fog, and has the advantage of operating over a greater area than either sound or visual signals.

Sir Ernest Shackelton thought it worth while to give some of his scanty room to it on his last Antarctic trip.

In case of disaster when ordinary communication is cut off, messages can still be sent out by radio.

Patients on shipboard have been successfully treated by physicians on shore.

Radio and the great railroads are rapidly being linked together. Experiments have proved that of these two great arms of progress and civilization, radio and railway transportation, the former is destined to enable the passengers and train crews to maintain a conversation with any fixed point, from fast moving trains, and they may be supplied with entertainment and news of the world as they speed along to their destination. The Chicago, Milwaukee, and St. Paul Railroad claims to have the first radio installed for the use of the passengers.

Radio is now being installed on airplanes. This will be a great help to the airplane because if it is forced to land in a remote place it can signal for help. Only recently four tourists, on a crippled seaplane, were killed off the Florida coast. These lives could have been saved had a radio been installed on the plane. The British House of Parliament announced that regulations are to be issued making it compulsory to carry radio on all British aircraft. These regulations will be issued as soon as the International Convention on Aerial Navigation has been signed by a majority of the signatory states. . . .

Chicago was the first city to officially adopt radio telephone for its police force.

Each officer, on patrol duty, has a small receiving set with which he picks up orders from headquarters. Chicago also has a flying squadron of automobile radio stations which are each equipped with a sending and receiving set.

The Fire Chief in Trenton, New Jersey, has a radio in his automobile, so that he can attend fires and still keep in touch with headquarters.

It is being used in mines to locate coal, oil, and other bodies, solid, or liquid, or even gaseous.

A grocer in Des Moines, Iowa, talks to his customers by radio-telephone, giving the prices of staple goods and adver-

tising his special sales. The news has spread and many people take advantage of the sales.

Again judging from what has already been accomplished by radio in spreading information, it is bound to play an important part in providing an education for every man. . . .

Huge classes comprised of men in all walks of life are enrolled in the Freshman class of the world's greatest institutions and without paying tuition. Lecture courses in science, law, medicine, literature, art, music, and history will be nightly occurrences from not only Tufts College, operating W.G.J., but from New York University, St. Lawrence University, University of Wisconsin, and University of Michigan, and many other schools and colleges. The lectures will be brief, not exceeding thirty minutes. Some will be broadcasted in the afternoon but mostly in the evening. They will be given very simply, so that no technical education will be necessary to understand them.

The University of Wisconsin is taking advantage of the opportunity to serve the public by broadcasting 10-minute speeches on various subjects of public interest. . . .

High schools and grade schools all over the country are joining the "Radio in the School" movement. In the future the little red schoolhouses will be colleges, through the work of the radio. Boys and girls of the rural district may be taught mathematics, literature, art, and other subjects by the greatest of present day teachers. In this way the farm boy or girl may receive a diploma for good work and in this way be advanced in his education. . . .

EXAMPLES OF ARTICLES READ

The clippings notebooks showed that a wide range of magazines and newspapers had been covered, and that widely

varying uses of wireless had been considered. The following is a list of titles taken from the clippings in the scrapbooks:

- "The Wireless Telephone"
- "Music Lessons by Radio"
- "Religious Station Out in Kansas City"
- "His Voice over Radio Wins Pardon"
- "Greatest Farm Service"
- "Radio Teaches Deaf"
- "Stations by Wave Lengths"
- "Business on Air in Emergencies"
- "Radio in London Schools"
- "American Dirigible Carries a Powerful Radio Plant"
- "Seeing by Radio"
- "Radio Spreads News of Every Kind over World"

The following list represents pictures found in the notebooks:

- "Class in New York School Listening to Grand Opera"
- "Dr. David Todd, Noted Astronomer, Attempts to Broadcast Pictures of Eclipse"
- "Teaching Deaf Children by Radio"
- "Classes Being Taught Penmanship by Radio"
- "Physical Education by Radio"

CHAPTER XII

NEWSPAPER CLUBS

OUTLINE OF WORK

I. Aim : Organization

Plan :

- A. Examine magazines of other years and schools ;
discuss plans for this year.
- B. Assign definite duties to each member.
- C. Get together a library for use in club.

1. Public Library

Gibbs, P. H. : *Adventures in Journalism*,
Harper and Brothers

Kirkland, W. M. : *Boy Editor*, Houghton
Mifflin Company

Lord, Chester S. : *The Young Man and
Journalism*, The Macmillan Company

Payne, G. H. : *History of Journalism in the
United States*, D. Appleton and Company

2. Madison, Wisconsin, State Packet Library

Brewster, E. T. : *Vocational Guidance for
the Professions*, Rand McNally and
Company

Weaver, E. W., and Byler, J. F. : *Profitable
Vocations for Boys*, A. S. Barnes and
Company

Whitehead, H. : *Your Job*, Gregg Publishing
Company

3. Lincoln School Library

Bassett, Sara Ware : *Paul and the Printing Press*, Little, Brown and Company

Brooks, E. S. : *Historic Girls*, G. P. Putnam's Sons

Parkman, Mary R. : *Heroes of To-day*, The Century Company

Parkman, Mary R. : *Heroines of Service*, The Century Company

Sanford, C. M., and Owen, G. A. : *Modern Americans*, Laurel Book Company

Sanford, C. M., and Owen, G. A. : *Modern Europeans*, Laurel Book Company

Washington, Booker T. : *Up from Slavery*, Doubleday, Doran and Company

II. Aim : Study of the editorial

Plan :

A. Examination of school newspapers of Kenosha Junior High School

B. Discussion of editorials

C. Practice in writing editorials

D. Selection of best material for newspaper

III. Aim : To practice story writing

Plan : To write stories and selections for newspaper

IV. Aim : To work on humor for paper

Plan :

A. Discussion of :

"Limericks"

"Why These People Are Noted"

"Musical Rôle"

"Alphabet Jingle"

"Moments We'd Like to Live Over"

"Can You Imagine?"

B. To choose one topic and work on it

- V. Aim : To visit print shop
- VI. Aim : Work on news items and school activities
Plan : To work at blackboard in getting items together
- VII. Aim : To get out newspaper
Plan : To get together all material and print and sell paper
- VIII. Aim : To have speaker for club
- IX. Aim : To write editorials for new issue of paper
Plan : To follow plan of II
- X. Aim : To write stories for paper
Plan : To follow plan of III
- XI. Aim : To supply humor for paper
Plan : To follow plan of IV
- XII. Aim : To work on news items and school activities
Plan : To follow plan of VI
- XIII. Aim : To visit plant of interest in connection with club work
- XIV. Aim : To get out last issue of paper
Plan : To follow plan of VII
- XV. Aim : Speaker for club
- XVI. Aim : General summary of things learned through club work
- XVII. Aim : Party for club

SPECIAL PROJECTS IN CONNECTION WITH CLUB WORK

- I. Read books that will give understanding of this work.
- II. Print the paper.
- III. Sell papers and make them pay financially.
- IV. Visit places of interest in connection with work of club.
- V. Hear speakers who will give practical ideas of this work.
- VI. Appreciate social values :
A. Work together without friction,

- B. Get other people to buy paper.
- C. Keep everything unkindly out of paper.
- D. Be courteous on trips.
- E. Be courteous in inviting speakers and in treatment of them when they come.

WEEKLY REPORTS

Weekly Report of Newspaper Club
Leader _____

Date Feb. 6

1. Plan for next week
Work on "Humor" part of paper
2. To-day's aim
Writing stories
3. Method
Practice in writing stories, the best one to be used in the paper
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read and amount of reading done
 - Boy Editor* completed
 - Historic Girls*, 40 pages
 - Modern Europeans*, 59 pages
 - Heroines of Service* completed
 - Paul and the Printing Press*, 75 pages
 - Modern Americans* completed
 - (d) Report of what was done
 - Talked over plans for speaker and visit to printing shop
 - Wrote stories
 - Checked up on reading

Weekly Report of Newspaper Club
Leader _____

Date Feb. 13

1. Plan for next week
Visit to print shop
2. To-day's aim
Work on "Humor" part of paper
3. Method
Talk over "Limericks," "Why the Irish are Noted,"
"Musical Rôle," "Alphabet Jingle," "Moments We'd
Like to Live Over," "Can You Imagine?"
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read and amount of reading done
Paul and the Printing Press, 138 pages
Boy Editor, 75 pages
Modern Europeans, 65 pages
Modern Americans, 200 pages
Adventures in Journalism, 80 pages
Historic Girls, 25 pages
Heroes of To-day, 65 pages
 - (d) Report of what was done
Some good writing on above, but we shall need to
work another day on this.

Weekly Report of Newspaper Club
Leader _____

Date Feb. 20

1. Plan for next week
Work on "News Items" and "Athletics" for paper

2. To-day's aim
To finish "Humor" part of paper
3. Method
Work together at blackboard
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
Chester —— and Miriam —— did original work.
 - (c) Books read and amount of reading done
Boy's Life of Edison, 60 pages
Modern Americans, 60 pages
Boy Editor, 75 pages
Modern Europeans, 50 pages
Paul and the Printing Press, 79 pages
Historic Girls, 75 pages
Heroes of To-day, 200 pages
 - (d) Report of what was done
 Checked reading
 Gave out new books
 Talked over next meeting
 Committee chosen to see about going to print shop

Weekly Report of Newspaper Club
Leader _____

Date March 6

1. Plan for next week
Get paper together
2. To-day's aim
Visit to print shop at Vocational School
3. Method
4. Report of work accomplished

Weekly Report of Newspaper Club
Leader _____

Date March 12

1. Plan for next week

Work on editorials for next issue of paper

2. To-day's aim

To get material ready to issue paper

Visit to print shop on Appleton Street

3. Method

Choosing material for paper

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

Heroes of To-day, 130 pages

Boy Editor, 129 pages

The Young Man and Journalism, 35 pages

Up from Slavery, 75 pages

Paul and the Printing Press, 50 pages

Heroes of To-day, 61 pages

Historic Girls, 34 pages

History of Journalism in the United States, 50 pages

(d) Report of what was done

Weekly Report of Newspaper Club
Leader _____

Date March 19

1. Plan for next week

Work on "Humor" for paper

2. To-day's aim

To make plans for club and ask Mr. — to write editorial for new issue

3. Method

Offer of seventy-five cents for story for new issue

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

Historic Girls, 70 pages

Modern Europeans, 67 pages

Up from Slavery, 30 pages

Paul and the Printing Press, 60 pages

Boy's Life of Edison, 160 pages

Heroines of Service, 300 pages

(d) Report of what was done

Talked over plans for using funds of the club

Weekly Report of Newspaper Club
Leader _____

Date April 2

1. Plan for next week

Work on "Humor" for paper

2. To-day's aim

To discuss plans for prize offer for story

To work on "Humor"

3. Method

Time for writing, discussion of writing, choosing what is worth while

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

Some Newspapers and Newspaper Men, 42 pages

Modern Europeans, 50 pages

Heroes of To-day, 327 pages

Up from Slavery, 25 pages

Modern Americans, 35 pages

Boy's Life of Edison, 152 pages

Heroines of Service, 322 pages

(d) Report of what was done

Weekly Report of Newspaper Club

Leader _____

Date April 23

1. Plan for next week

Finish reading stories to choose prize story for next issue of newspaper

2. To-day's aim

To choose best stories from those written by four grades, 6, 7, 8N, and 8

3. Method

Individual choosing of best with silent reading, then oral reading of best

4. Report of work accomplished

(a) Good questions asked

(d) Good contributions

(c) Books read and amount of reading done

Paul and the Printing Press, 163 pages

Charles Dickens, 50 pages

Modern Americans, 40 pages

Historic Girls, 45 pages

Captains Courageous, 50 pages

Knights of the Round Table, 234 pages

(d) Report of what was done

Weekly Report of Newspaper Club
Leader _____

Date Feb. 5

1. Plan for next week
Visit to print shop at Vocational School
Get out first edition of newspaper
2. To-day's aim
To test our ability to "scent" news
3. Method
Spend half hour on near-by streets hunting "copy." Re-
turn at 11.30 and report results to Miss _____
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
Some sports news brought in by boys
Personals contributed by A ——
A pioneer story
 - (c) Books read and amount of reading done
 - (d) Report of what was done

Weekly Report of Newspaper Club
Leader _____

Date Feb. 19

1. Plan for next week
Check up on all contributions; rewrite corrected copy
from last week; see that L—— has his installment
on continued story ready
2. To-day's aim
To gather up loose ends; start next paper; get report on
visit to Vocational print shop; obtain any other
material that is available

3. Method

Sit at table and write as fast as possible on assigned topics ; see how much can be accomplished

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

"News Gathering Adventure" the best effort thus far

(c) Books read and amount of reading done

(d) Report of what was done

First edition of the *Parrott* published this week ; 65 copies sold at 2 cents each

Weekly Report of Newspaper Club
Leader _____

Date March 5

1. Plan for next week

Examine and answer questions found in "Question Box" ; try to begin another serial story

2. To-day's aim

To correct and recopy last week's copy ; add any personals or other news brought in

3. Method

4. Report of work accomplished

Weekly Report of Newspaper Club
Leader _____

Date March 26

1. Plan for next week

To publish March edition of paper

2. To-day's aim

To complete question answering. Some questions found in "Question Box" not answered last week, because books were not available

3. Method

Visit to Public Library to consult encyclopedia or other source of information

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Several stories handed in for a story contest

(c) Books read and amount of reading done

Any number of encyclopedias and magazines

(d) Report of what was done

CONTRIBUTIONS TO THE NEWSPAPERS

Columbus Parrott

Volume 2, Number 2

March, 19—

Price 2 cents

EDITORS

Aroneil _____

Albert _____

Leslie _____

FACULTY ADVISER

Miss _____

MOTTO

"Any old fish can float
along and dream,
But it takes a real
live one
To swim against the
stream."

STORY CONTEST

The *Parrott* staff is conducting a story contest at present; purpose two-fold: namely, to secure material for the *Parrott* and to arouse an interest in story-writing. A number of stories have been handed in to the editors, and the contest will close next week, winners being announced on the bulletin board. Watch for announcement. The prizes are:

First, 25 cents

Second, 15 cents

Third, 10 cents

EVENTS: SOCIAL, DRAMATIC, AND
MUSICAL

Ours was one of the schools which participated in the splendid entertainment presented at Law-

rence Chapel on the evenings of March 12th and 13th. A large number of our boys sang with the two hundred and fifty who gave a group of musical numbers under Dr. _____'s direction, and all of our sixth, seventh and eighth grade girls sang in "The Swallow," the cantata directed by Miss _____. Helen _____ was the Columbus soloist, and proved herself a credit to the school. We all enjoyed the operetta "Jack and the Beanstalk," which the Conservatory students presented on the same evenings, and which we were invited to hear.

Besides the vocal part of the program there was also the initial appearance of the orchestra, in which we had a share. Roy _____, Harvey _____, Alfred _____, Howard _____, Cyrus _____, and Gilbert _____ represented our school in the orchestra personnel.

Miss _____ has recently organized a Second District Girls' Glee Club, which is to meet on Tuesday evenings at the Conservatory, and soon expects to show the boys that Glee Club honors are not to be monopolized by them. Phoebe _____ and Helen _____ are the Columbus representatives, with several on the waiting list.

SPORTS

On February 10th, the Columbus School Five journeyed to the Fourth Ward School to play their

first game of the season. The final score was 9 to 6. The Fourth Warders outclassed the Columbus Five, but after the first half the Five came back with a rally. The Fourth Warders expected to white-wash the Five 30 to 0 but they found their hands full with the scrappy Five.

Columbus School was awarded the soccer banner through the efforts of Captain _____ and the team. There was a hard fought game between the Lincoln and Columbus teams.

The baseball season opened in real earnest this week at our school. Some of the boys give promise of filling Babe Ruth's place, if he ever gives them a chance. It sure is a real team.

The Valentine cross-word puzzle, which the *Parrott* offered to its readers, was solved by Evelyn _____, Walter _____, John _____, and Verona _____. These four will be given free copies of the *Parrott*, this issue.

PERSONALS

Miss _____ was absent from school for two weeks because of illness.

Erhardt _____, formerly of the St. Paul's School, has joined the ranks of Columbus Seventh East.

Beulah _____ is another recent addition to the Columbus eighth grade, and Muriel _____, formerly of Battle Creek, Michigan, is now a Columbus second grader.

Ralph _____ has returned to the second grade after a long illness with scarlet fever.

Mr. _____ is attending the National Music Convention at Kansas City this week.

QUESTION BOX

We are introducing a new department to our readers in this issue. It is the Question Box, the oracle which tells you anything you want to know, on any subject. Just drop your question in that little box which we have placed on the hall table, and presto! the paper is published and there is your question all nicely answered.

Our subscribers have not responded as well as we think they might, as yet. But we are publishing replies to seven interrogations in this number, as follows:—

1. Who was the second traitor after Benedict Arnold?

Answer: Butler

2. What was the 1924 score in football between Harvard and Yale?

Answer: Yale 19, Harvard 6

3. Does the oven bird stay here all winter?

Answer: No

4. What country raises the most wheat? Corn?

Answer: United States

5. What is the area of the Arctic Ocean? Indian Ocean?

Answer: 4,781,000 sq. mi.
17,084,000 sq. mi.

6. Name five birds found in other countries and not in ours.

Answer: Nightingale, skylark, cuckoo, lyre, vulture, bird of paradise

7. Name the highest mountain in the world.

Answer: Mt. Everest in India. It is 29,000 feet high.

A BRAVE FIREMAN

By Albert —

In the stillness of night a fire broke out on 14th Street, in a large tenement house. Through the quickness of the janitor, the call which was needed was sent in.

In about ten minutes the engines and all the apparatus were in position.

When the chief thought all the people were out he was mistaken, for as Tom looked at a small window high in the house he saw a forlorn looking figure. While the chief was keeping the people from crowding too close, Tom was on his rescue journey. He passed through many smoke-filled rooms and at last reached the almost forgotten room. He picked the person up and was soon on the ground. The chief patted him on the back when he reached the ground and gave him a medal for bravery. And

Tom always followed his motto, "Others before Thyself."

JOKES

Teacher (to history class) — "What kind of birds are frequently kept in captivity?"

Johnny — "Jailbirds."

Traveler — "Your son threw a stone at me."

Irishman — "Did he hit you?"

Traveler — "No."

Irishman — "Then he wasn't my boy."

Joe — "Say, Bill, an auto ran over Jim on the bridge."

Bill — "Oh, was he hurt?"

Joe — "No, he was under the bridge fishing."

Alice came into the house for luncheon with very dirty hands. Her mother looked at her hands and remarked, "You never see my hands as dirty as yours." "No, Mother," replied the child, "but Grandmother did."

The Lincoln Trumpet

Vol. 2, Issue 3

April, 19—

Price 2 cents

EDITORS

Anita ____
 Elsie ____
 Dorothy ____

REPORTERS

Helen ____
 Doris ____
 Mildred ____
 Elvera ____
 Bernice ____
 Iris ____

BUSINESS MANAGERS

Kenneth ____
 Harold ____

"If the day looks kinder
 gloomy,
 And your chances kinder
 slim,
 If the situation's puzzlin'
 And the prospect's awful
 grim,
 And perplexities keep
 pressin'
 Till all hope is nearly
 gone;
 Just bristle up and grit
 your teeth,
 And keep on keepin' on."

EDITORIALS

A strange bird of brilliant plumage caused a great deal of excitement in a certain neighborhood recently. The song of this bird sounded like, "Aren't you-going-to-have-a-garden? Aren't you-going-to-have-a-garden?"

This started the children to thinking, "Why-not? Why-not?"

The storekeepers were soon so busy selling seeds that they had to send for a new supply.

Let us hope that this strange bird has reached the city of Appleton, for what is home without a garden and growing things around it? What is more beautiful than to live out of doors and dig in the soil!

The people of the United States think gardens so important that they have established a National Garden Week from April 20th to 26th.

Jean ____

IT IS OUR DUTY TO KEEP THE
CITY CLEAN

The beauty of our city depends upon the people living in it. If the people are neat and careful about things such as ashes, old cans, and garbage, our city will be neat. We can feel proud of a city like that.

When our city is kept clean it is pleasing to look upon. Visitors from other cities when they come here and see our city clean will naturally carry the news home with them.

The city cannot be kept clean by only a few people caring for it. Everyone must take upon himself the duty of keeping the yards and streets clean. In this way our city will be clean and beautiful.

Anita ____

NEWS ITEMS

The two eighth grades had some very interesting debates during the past week. Some of the best subjects were "Should Children Buy Their Own Schoolbooks?" "Colonial Life Was Better than Life To-day," "Should Girls Be In Earlier in the Evening than Boys?" "Should the School Day Be Lengthened So That All Studying May Be Done in the Schoolroom?" "Which Is Better Exercise, Swimming or Walking?" Miss _____ acted as critic.

The boys of the sixth, seventh and eighth grades have formed four baseball teams which will play at recess.

The seventh grade girls had a sad accident. Their ball went through one of the windows of the third grade. They showed good sportsmanship by having a sandwich sale to make good the loss.

The Girl's Basketball Team played a game with St. Joseph's School on April 16th. The score was 23 to 20 in favor of St. Joseph's. The girls of St. Joseph's have played since last November, so our girls did good work.

We are all proud of the work done in the operetta given by the school on March 21st. Betty _____ as Snow White won much praise, and Evelyn _____ portrayed the wicked queen in a very interesting way.

Hurrah for the Eighth South and the Seventh Grade of the Lincoln School! The former won the championship banner for the third successive year, and the latter the sportsmanship banner in the District Tournament.

We all like Miss _____'s looks

more than ever. Do you know why?

The girls of the Teachers' Club visited the Triangle School on April 17th. They looked very dignified when they left, but we know they had their lunch with them and had a good time planned too.

Howard _____ has returned to the First Ward School after being with us most of the year.

Miss _____, librarian at the High School, gave us an interesting talk on books and the use of the library. She made us anxious to go to High School to read some of the interesting books.

The tailors are overworking these days making long trousers for the boys of our school. Be careful, Wilmer, don't wear them out before graduation.

Stop! Look! Listen!

These are the three winning stories in the Story Contest conducted by the Newspaper Club.

The first prize of one dollar was awarded to Helen _____, the second prize of seventy-five cents to Elsie _____, and the third prize of fifty cents to Evelyn _____. The judges were Mr. _____, Miss _____, Miss _____.

MY ADVICE TO THE EIGHTH
GRADE OF NEXT YEAR

My advice to the eighth grade of next year is this: There are always a few people that have a don't-care attitude about their work. It is this kind of person that is sure to have a hard time during the term. If you have that

attitude make a resolution to get rid of it.

Another important piece of advice is, Don't work hard one month and sit back the next month and say, "Oh, I had good standings last month, I don't have to work so hard this month." Be a steady worker. One can always tell the steady workers because they are the ones that get ahead in the world. If you come to school with your mind made up to work I am sure you will have good standings all year. The other kind of a person that works hard one month and sits back the next month certainly will not be at the head of the class. He is always the one that will wonder why his marks are low, and will go home and say, "I don't see why my marks are so low. That old teacher just gives me low marks for meanness, or because she doesn't like me." He will naturally feel bad when he sees his classmates graduate and he is not among them.

When you are in the eighth grade next year study first, then if you have time to spare do something else. If your teacher is explaining something, listen to her. She is doing this for your own good and not just because she wants to. You must remember teaching boys and girls or young men and women is not all fun.

Eighth graders are old enough to behave themselves. Everyone can have good standings in deportment. One of the most important things to remember is, Don't be a sneak or do things in an underhand way.

If a study or subject is very hard for you, don't give up or stop work-

ing but try to get it. So often boys and girls just give up and say the work is altogether too hard for them and they can't get it. Just for that simple reason they don't graduate.

Obey the rules of your room and school. This is very important. If you do things against the rules of the school people form a bad opinion of you. For instance, if one of the rules of the school was, "Don't throw snowballs on the school grounds." Maybe a certain pupil might throw a hard snowball and hit some small child. How would you feel if he were seriously injured? Keep in mind all these bits of advice because I know there isn't anyone who would want to be a poor eighth grader.

Helen _____

A BIT OF DETECTIVE WORK

Things had been going very smoothly at the Washington School, as things usually do before a great excitement.

Monday afternoon as a thunderbolt out of a clear sky the principal, Mr. _____, called a special assembly, which was only done in matters of great importance.

Mr. _____ said that fifty dollars had been stolen. The money was in a purse which was tightly closed. It was also found tightly closed but the money was gone.

"I am sure," he went on, "that no one in this school would do such a thing, so it must have been an outsider. I hope all of you will coöperate with me in finding the one who took the money."

Everyone crowded around the boy who had lost the money.

"What were you doing with so much money?"

"What will your mother say?"

"Where did you get the money?"

"One at a time," said the boy, whose name was Elmer. "I was putting the money in the bank for my mother and I am sure I don't know what she will say."

Then everyone started to do some detective work for Elmer.

One boy who was a pupil of the school was suspected and of course everyone wanted to prove him innocent and so protect the honor of the school. But all evidence pointed toward him. He was in the hall at the time the money was supposed to be stolen. His people were very poor and they would have good use for the money. He did not know many people.

Elmer went home and told his mother all about it and he blamed the boy more than he should have been blamed.

His mother laughed and said, "Elmer, you didn't take the money to school. I forgot to put the money in the pocketbook and you took an empty one. You go right over to that boy's house and tell him about it."

From that time Elmer was one of the best friends that boy had.

Elsie May —

THE SCHOOL MICE HOLD A MEETING

The pupils who attend the Lincoln School are so busy studying they never hear the "Mice Council" in the school attic.

When the school was built a

young couple of mice made the building their home. The Dean Taxi Company delivered all their furniture and luggage to their door for the small sum of five cents. One of the workmen who helped finish the school lost the nickel that Mr. Mouse found and gave to the Taxi Man.

When the mouse family had settled, their friends and relatives also moved in, making the young wife a good deal of unnecessary work. In going to and from their apartments they usually crossed Mrs. Mouse's new door mat and made their muddy foot tracks on it. So the young couple's peace turned into the trouble the "Mice Council" are holding their meetings about.

After the boys and girls have left the school, and Mr. —, the School Janitor, puts out the light and goes home for supper, the council begins.

First, the funny old councilmen take their places at an old desk which was formerly used by some teacher. The blotter was worn out in the spots where the teacher holds her head on her elbows when thinking what to do with some bad boy. A large spot of blue ink at the right showed that some bad boy who was called to the desk was nervous. Also an empty bottle of red ink gives us the impression that many children visited the woodshed quite frequently because of red marks which decorated their report cards.

The meeting is now called to order. Everyone clears his throat and sits up in position so he won't miss a word. The President speaks. "My dear Ladies and

Gentlemen, Mrs. J. Longtail, who was the first wife to settle in this place, complains about your running back and forth on her door mat. If you will kindly stay in the attic and not go down to Jimmy Smith's desk looking for something to eat, all the trouble will be ended. All those in favor will leave the council room and those who are not in favor remain to suffer the consequences." All left the room, even Pete Billy Mouse, who was the one that made most of the trouble because he always ran across Mrs. Mouse's door mat when going to visit Jimmy Smith's desk.

The trouble is all over now, so you needn't stop studying to hear the "Mice Council."

A is for Alfred, a radio fan,
 B is for Bowlby, our handy man,
 C is for Conduct, away goes a five,
 D is for the Dwarfs, who were
 very much alive,
 E is for Eleanor, who's now
 bobbed her hair,
 F is for Ferron, our usher, what
 shall he wear?
 G is for Goodrick, who gets up
 too late,
 H is for Henderson, who's now up
 to date,
 I is for Ignorance, which for some
 is bliss,
 J is for Jackson, no gum
 wrappers does she miss,
 K is for Kunitz, a very fine boy,
 L is for Limericks, in which we
 take joy,
 M is for Montgomery, who pan-
 cakes can bake,
 N is for Newspaper Club, which
 takes the cake,

O is for Orbison, who looks out
 for germs,
 P is for our Principal, who settles
 us by turns,
 Q is for Queen in the "Snow-White
 Play,"
 R is for Raymond, who dreams all
 day,
 S is for Lincoln School we like so
 well,
 T is for Teachers, who can't teach
 us to spell,
 U is for Us, aren't we bright?
 V is for Vacation we dream of day
 and night,
 W is for Warnings we've heard this
 year,
 X is for Xcuses, which our teachers
 don't hear,
 Y is for Young, who will never be
 Old,
 Z is for Zimmerman, good-looking
 and bold.

MOMENTS WE'D LIKE TO LIVE OVER

When John ____ passed snuff.
 When we saw the teacher walk-
 ing with her beau.
 When Carl ____ had white rats
 in his pocket.
 When the last Pep Meeting was
 held.
 When the schoolhouse couldn't
 be heated.
 When mother bakes cookies.
 When teacher goes out of the
 room.
 When we are let out of school
 earlier.
 When the school clocks are fast.
 The first time we had one
 hundred in Conduct.
 The first time we wore long
 trousers.

CAN YOU IMAGINE:

Percy ____ with eight red marks?
 Elmer ____ not having a joke?
 The sixth and seventh grades
 with 20% in banking?
 Miss ____ throwing paper on the
 school grounds?
 The teachers with their hair
 bobbed?
 Miss ____ using "ain't got"?

Mr. ____ letting us dance down
 the stairs?
 Miss ____ being grouchy?
 Mr. ____ teaching sewing?
 Nine months of vacation?
 Miss ____ forgetting to weigh us?
 Getting a pound of candy instead
 of an extra 100?
 School starting at six o'clock in
 the morning?
 Chester ____ weighing 500
 pounds?

The Lincoln Trumpet

Vol. 1, No. 5

April 27, 19—

Price 2 cents

EDITORS

Betty ____
 Margaret ____

REPORTERS

Ione ____
 Wilmer ____

BUSINESS MANAGER

Eleanor ____

PRIZES FOR BEAUTIFYING
GROUNDS

The First National Bank will give \$10 in shrubs for the best plan in the city of a front or back yard. Many of the boys and girls at Lincoln have talent for this very thing, and we hope they will take advantage of the bank's generous offer.

For those who would rather make a real garden than draw one, there are the prizes offered by the Women's Club. One prize is for the best front yard, and the other is for the best back yard.

These prizes, which are \$5 each, will be given only if the yards conform to the strict rules of landscape gardening.

PRIZE RECORD PURCHASED

With the prize money which the Eighth North won in the previous banking contest, they have selected a record. On one side is "To a Wild Rose" by MacDowell, and the other "The Rosary" by Nevin. The Eighth North has very generously decided to put this record at the disposal of the Music Dept. so that the other grades may also enjoy it. We think, however, that the Eighth North will get the most enjoyment out of it because they earned it by their hard work.

COMMENCEMENT NUMBERS

Would you like to know what the program for graduation is? Here it is. The numbers, of course, are not in proper order.

Two songs — in which everyone will join

A Reading on Tree Surgery.
Robert _____

A Reading on Tree Surgery.
Arthur _____

Why I Want to Be a Teacher.
Sylvia _____

The Advantages of a Teacher's Course.
Ione _____

Dance.
Marie _____

Piano Solo.
Ora _____

Violin Duet.
H. _____ and E. _____

A Talk on Wireless.
Daryl _____

A Talk on Wireless.
R. _____

Original Short Story.
Betty _____

Reading of "Trumpet-Tattler."
Margaret _____

VISITING DAY

Starting May 2d, and continuing for 4 days, will be visiting day at Lincoln School. Besides viewing the exhibits, the parents are invited to come during school hours to see how the children get along in their studies.

CLASS PINS

The eighth grades are much relieved, for their class pins arrived last week. They have the letters A-L-S on them, standing for Appleton Lincoln School, and a big silver '22 in the middle, against a background of American beauty.

EXHIBIT

Next May 2d will be exhibition day. A day to show all the work

that we have labored over all year. Even now, owing to Miss _____'s work, and some of the girls' co-operation, most of the Eighth South drawings are mounted on the large exhibition paper, and some of the other grades' painting and crayon work are also mounted. The girls' sewing is being made ready, and the boys' manual training work is almost done. We think that we ought to be proud of the lovely work we have been doing all through the year, and we feel grateful for the splendid help that Miss _____ has given us in doing these things.

A PENCIL SHARPENER

Good for the sixth grade, they won the pencil sharpener, by nineteen points, too! Good for the Eighth North, who put up a hard fight for it. It surely was a hard contest, as one by one the other grades dropped out, until only these two grades were left. I think the Eighth South feels sort of sheepish to think they didn't work harder. One of the editors (much to the other editors' disgust) says that of course, if the Eighth South had worked very hard, they would have left all the other grades in the dust long ago. But then, we all, even the Eighth North, want to congratulate the sixth grade.

CLUBS

BICYCLE CLUB

The first meeting of the *Trumpet* Bicycle Club was held at Betty _____'s home last Friday. Five members were present, three being unable to come. The five present

were: B. —, G. —, E. —, C. —, and E. —.

The meeting was called to order, B. — acting as chairman during the election to the presidency. E. — was elected. The initials of the name chosen are: B. M. S. What they mean is a secret.

The members hope to have a picnic as soon as the weather is favorable.

LITERARY CLUB

At the meeting of the Literary Club, Friday, commencement numbers were discussed.

RADIO CLUB

The magnet was discussed at the last meeting of the Radio Club.

TEACHERS' CLUB

The Teachers' Club met last Wednesday in the kindergarten. Leone — gave a very interesting report on the "Brown Mouse." Then Mr. — talked on the possibilities of success, when teaching in a country school, as for instance teaching the boys and girls to test milk, to grow the best wheat, etc. That means that children intending to be farmers would learn mainly things that would help them to operate a farm and so on.

When asked *why* she wanted to be a teacher, one thoughtful girl replied, "Why I think it is the best way to pass your knowledge on." That is a beautiful thought and we hope all the members will succeed in that way.

STOLEN JEWELS (Continued)

Nearer, nearer, oh, would those hurrying steps never stop? Sue, under the bunk, lay shivering imagining the horrors of being caught by the owner of those angry steps. She had gasped with amazement and horror when the clamor of the iron box came to her ears. What had Milt done? They would surely get caught, what would they do? Whatever possessed Milt?

But the steps had stopped. Why? Did it forebode good or evil? She lay there for some time, not daring to move; then, when her curiosity grew stronger and stronger, she ventured to look. What she saw made her eyes grow big and round, for a man rushed past the door, and disappeared in the forest outside. Sue scrambled to her feet, and was met by Milt holding the strange iron box.

"Oh, oh, oh," Sue cried, "whatever happened? Whatever made you do that? I never was so scared in all my life!"

"Oh, it was an accident, but we aren't in any danger now, 'cause that man's gone ten miles by this time!" he answered.

"But aren't you afraid he'll come back?" Sue ejaculated. "He looked awfully desperate. Maybe he's a robber, maybe he's a thief, maybe he's a moonshiner, maybe he's a kidnapper, maybe he's a . . ."

"Oh, isn't that just like a girl," he laughed, "always worrying. But look here, this is a real mystery box, out of a secret closet, come and sit down and open it." So they did, and by some freak the box was not locked.

The lid slowly opened, wider and wider, and then stood still, displaying the magnificence of its store within.

The boy and girl sat still for a moment, as if hypnotized by the brilliance of the jewels, and they were jewels, thousands and thousands of dollars' worth, pearls, rubies, diamonds, garnets, emeralds and sapphires, set in gold and silver and platinum. The sun shone on them, through the little window, and they dazzled and shone with brilliant luster.

Then Sue spoke, "Oh, aren't they beautiful, aren't they glorious? Whose are they, what are they doing in this little cabin? Are they the man's? Are they . . . ?"

"Say, hold your horses," laughed her brother. "But they are beautiful, let's take them out, so we can see them better."

As Sue assented, they took the jewels out of the box. When they were all laid out on the bed, Sue, who was fumbling around in the bottom of the box, exclaimed excitedly, "Look Milt, what I've found, a paper cutting; it looks quite mysterious."

"And sure enough, it is," said her brother. "I suppose you never saw a paper before, did you?"

"But, Milt, look. It says something about 'stolen jewels.' See, I'll read it to you."

She read, "Jewels amounting to millions of dollars have been stolen from the Barnside safe. They are of such great value that the owner of them has offered a reward for any clew leading to the whereabouts of the thieves, \$2000 for the jewels alone, and for the thieves and jewels, \$10,000."

She stopped reading and looked out of the window. The sun was setting and its rosy radiance lit the magnificent forest with fairy-like splendor.

She said, "Oh, these wonderful jewels, I see now how they got here. I see . . ."

"Then," exclaimed her brother, "you think these are the very jewels spoken of in the paper. That's why the . . ." But he never finished the sentence, for the door slammed shut and certainly not from accident. The boy and girl heard the sound of the rusty lock grating shut.

They sat still for a moment, and then Milt rushed to the door. It was locked! Sue exclaimed, "We're locked in. Oh . . ."

To be continued

DEBATE

The debate for April 28th will be **RESOLVED**: that the *Lincoln Trumpet* is a better paper than the *Lincoln Tattler*.

Negative:

Wilder _____

Gwendolyn _____

Affirmative:

John _____

Harold _____

STUDYING LONDON

Miss _____ is giving interesting talks and showing interesting pictures of London to her geography class. They are studying Europe now. They are so entertaining that they make geography a real pleasure, instead of a dull study.

Miss _____ has a very beautiful inscription on the board:

In the midst of the light is the beautiful,
In the midst of the beautiful is the good,
In the midst of the good is God.
Old Inscription

SAVE A LIFE

Snooky is in danger. Very grave danger. Any day he may be shot. For Snooky has no collar, and no license.

You know Snooky, don't you? The merry, frisky little dog, with the black patches over each eye? The pet of the playground? You'd be willing, wouldn't you, to go without some gum or some candy to save his life? Of course you would.

So hold on tight to that nickel, until we tell you our plan. It's a glorious one, and you'll know it very soon. Meanwhile remember, Snooky is more important than any old chewing gum.

IN THE KINGDOM OF BOOKLAND

If you have read the books we guaranteed last time, you will certainly be eager for these.

Northern Diamonds, by Rollack, is a gripping story of adventure and mystery in northern Canada. It fairly tingles with the life of the outdoors, and every boy will like it.

Running Eagle, by Schultz, is a story of Otaki, an Indian girl who refuses to do the work which a squaw is supposed to do. She goes to hunt on the war-path; and all in all, her adventures make very interesting reading.

Adopting of Rosa Marie, by Rankin. This is a funny little story of four girls who set up house-keeping. One, a scatter-brain, adopts for a day a foreign child. The trouble in which this involves her will keep you laughing until you finish the book.

The Varmint, by Johnson, is a story of boarding school days. How a boy gets in wrong at the start, and then how he works himself up to be an influence for good in the school, make an interesting book.

BEGINNING AT HOME

"This paper says that millions of children will starve this winter in Europe."

"Oh, that reminds me! I forgot to feed Fido his chop and he must be just starved."

INTERRUPTED

"Here is a letter it would hardly do for us to publish," said the patent medicine quack. "A man writes: 'I have just taken the first bottle of your medicine _____.'"

"Well?" said his partner.

"There it breaks off short, and is signed, 'Per executor.'"

CLEARLY ABSURD

A Frenchman, learning English, said to his tutor: "English is a queer language. What does this sentence mean: 'Should Mr. Noble, who sits for this constituency, consent to stand again and run, he will in all probability have a walkover'?"

SALESMANSHIP

"How do you manage to sell so many fireless cookers?"

"It's due to my method of approach, Percival," said the smart salesman. "I begin by saying, 'Madam, I have called to enable you to spend every afternoon at the movies.'"

EDITORIAL

We agree with the man who said, "I am for my country above any other country, and my state above any other state, my city above any other city, my district above any other district, and my side of the road above any other side of the road."

It is true that we are students of Lincoln but it is also true that we are citizens of Appleton. We want our school grounds, of course, to look nicer than any other school grounds in Appleton, but we also want Appleton to look better than any other city in the state.

Some of us confine our picking up to the school grounds alone. Why not "pick up" everywhere in the city so as to make Appleton in truth "The City Beautiful"?

Frank — has the most wonderful assortment of playthings that could ever be found in the school. One look in his desk would make any teacher break down with nervous prostration. There is everything there, from sticks of tin to quicksilver, from lead to paper dolls. He entertained us all the other day by rolling mercury around on a magazine. If it wasn't for Frank, the schoolroom

would certainly be lacking in "the spice of life."

We, the pertinacious adjective jerkers of this stupendous publication, do hope that you will derive infinite erudition from the edition that we have conferred upon you.

STICKS OF WOOD

Some people call girls "sticks of wood" but they really are not. They are just as good as any *boy* that ever lived, and ever shall live, but they haven't as many advantages, to show off their "goodness" as the boys have. For girls, recess means a time to walk around or sit down or something like that. They haven't anything to do. The Giant Stride is — well, if you know that that has been the only exercise they have had all this year, you will know why we are tired of it. The slide — it seems to be a recreation of the younger *boys*. Basketball boys. Baseball boys. High jumping boys. We don't want the boys' sports, or to be tom boys, though high jumping has some fascination for some of us, but we *do* want "something to do."

INTERVIEWING MRS. J. —

We know some of you boys are going to feel dreadfully insulted, but it can't be helped. Two teachers have been interviewed already, and it has been their unanimous decision that you are not bad, but only bad good.

Mrs. — said that all children are like the weather, no matter how seemingly bad, all for the best. "Anyway," she said, "while

Miss —— has been away there have not even been many bad good ones. Most of them behaved nicely. Indeed, I shall be sorry to leave for I feel acquainted with many of you. With some of the children of the Eighth South I feel especially acquainted because I

had them in the third grade. I have been here so long that I almost feel as though I belong here and I certainly will look forward to coming back again."

The class will look forward to having you again, Mrs. J. ——.

The Lincoln Tattler

Vol. 1, No. 5

April 17, 19—

Price Three Cents

EDITORIAL STAFF

G. Elizabeth ——

L. Harriet ——

BUSINESS MANAGER

Harriet ——

STAFF ARTIST

Elizabeth ——

REPORTERS

Charlotte ——

Helen ——

"SAVE 'EM, DON'T BURN 'EM"

Have you ever stopped to consider how many schoolhouse fires are occurring daily in the United States? Our record is not an enviable one, and the number is positively shocking. *Five schoolhouses are burned each day.* Here is something to think about. Unless the community has taken measures to protect the children, going to school is a risky job.

The fire season is nearly over, but the *Lincoln Tattler* is wondering if the pupils in our beloved

Lincoln School are properly protected. The building was erected before the day of strictly fireproof structures, so it should have, according to fire-prevention experts, at least these three features to guard the children:

1. Two big broad stairways easily accessible, and leading from the top floor to the basement.

2. Fire escapes, properly built, and not in any way exposed to windows from which flames might burst.

3. Automatic sprinklers kept in sure working order.

Is the Lincoln School properly protected? Are the children safeguarded? We have the first of these requirements, but how about the other two? There are no fire escapes upon the building. We are wondering if we, as students, cannot organize in some way to make escape sure if the unexpected and unwanted should happen.

A NEW LIST OF KINGS

The pupils at a certain school were asked to write original compositions on "Kings." The prize

was won by a bright youth who perpetrated the following:

The most powerful king on earth is
 Wor-king,
 The laziest king — Shir-king,
 Very doubtful king — Smo-king,
 The wittiest king — Jo-king,
 The leanest king — Thin-king,
 The thirstiest king — Drin-king,
 The slyest king — Win-king,
 The most garrulous king —
 Tal-king.

Wisconsin Agriculturist

GOOD ENGLISH

Perhaps the greatest invention in the world's history was the discovery that thoughts could be exchanged by means of words.

them as they are written, and to try to use different words. Let's talk, let's try to say the old things in new ways with new words.

THE STORY OF WHITE TEETH

By Elizabeth —

Chapter III

White Teeth Plays the Game

Poor little Bara was very frightened when he found himself in the hands of his father's enemy, Burning Bush. He struggled frantically to escape, and the strong man had all he could do to hold the wriggling captive.



One of the greatest abuses in the world is the way that so many people, even school children, spoil perfectly good English by poor pronunciation and careless omission of letters from the ends of words. There is too much jabbering, and not enough talking.

Let's try for the rest of the year to use the right words, to speak

White Teeth tried valiantly to rescue his terror-stricken master, but all in vain. His sharp teeth tore the captor's moccasins, and the man almost let Bara go as he turned to kick the bundle of white fury.

The barking and growling stopped, and Bara, somewhat recovered from his terror, looked

for White Teeth. White Teeth was gone! Bara almost cried. This was worse than his other misfortune. To be caught was bad enough. To be deserted was the last straw.

All that day, Bara was dragged through tearing brush and over boggy land. Toward nightfall, his captor tied Bara to a tree while he prepared camp. Poor Bara was exhausted. He slept. In his dreams, he saw White Teeth in all sorts of dangers. He tossed in his sleep as much as his bonds would permit.

Suddenly a screech owl hooted its hunger cry. Instantly Bara was wide awake. He saw by the full moon that his captor was sound asleep. Bara listened and looked intently. Then he raised his head as high as his bonds would permit, and from his throat came the cry of distress that his tribe used, the cry of the moose for its mate. Burning Bush rolled over, sat up and looked at Bara suspiciously, but the lad was apparently asleep. So Burning Bush dropped back into his torpor.

But where was White Teeth? When he could not free his master, he thought in his dog wisdom that he would go for help. He started out madly over the back trail, and in an incredibly short time Sitting Bull was startled by a barking, yelping, excited and bedraggled bundle of fur that tugged at the fringe of his leggings, and tried to drag him off into the woods.

It was White Teeth. The warriors were called. They talked with hands and tongues; they dashed madly about for their weapons; they prepared to follow the dog, who was rushing madly

toward the river and then back to camp trying to tell them to follow him.

In less than fifteen minutes, a war party was on the trail. White Teeth led the way. They came to the river, and the warriors got into a canoe with White Teeth in the bow. He stood up like a pilot, ears erect, tail wagging, and eyes straining ahead. They came to a bend in the river, and when the rowers would have gone around it, White Teeth began to bark and jump about. Sitting Bull motioned toward the shore. White Teeth became quiet.

As soon as the canoe touched the shore, White Teeth jumped out and started into the brush. The warriors followed so silently that scarcely a leaf stirred. In a few moments, Sitting Bull saw a sight that made his heart leap with joy. There was Bara, tied but safe. Beside him was Burning Bush, still fast asleep. The warriors circled the two, and in a moment the captor was a captive. Bara was released and hugging his friend with ecstasy.

"You keep heem. No sell," stated Sitting Bull briefly.

And White Teeth wagged his tail in joyful assent.

LOCALS

The two eighth grades had an English lesson which changed the school routine Friday. Each pupil gave a brief outline of a book and told why he or she liked it. The book reviews were very interesting.

The Lincoln students are busy arranging their art work. The Exhibit is to be held May 2.

The eighth grades are working on their graduation music now. Several pupils have been assigned their graduation parts.

Thursday evening, at eight o'clock, Marie —, a pupil of the Eighth South, and her father will give a program of dances. The entertainment will consist of Marie's class in Nature, Classic, Interpretative and Toe Dancing, also Mr. —'s children's class in Modern Ballroom, Folk, and Character Dances. An admission fee of 25¢ will be charged.

Mr. — has been working with the boys in the eighth grades who are interested in tree surgery. At present, they are trimming the school trees that were damaged by the recent sleet storm.

Sadie — gave a report before the Teachers' Club last Wednesday on "All the Children of All the People." Leone — will report next Wednesday on "The Brown Mouse."

Some of the eighth grade girls have worn out their bloomers, so they will have to get busy and make some more before the Exhibit.

Only a few more weeks of school, and then good-bye, dear old Lincoln, for some of us.

Lots of women think Easter Sunday is Decoration Day.
Selected

NEW LONDON FLOOD

The editors of the *Lincoln Tattler* made a flying visit to New London Saturday afternoon and found that the Appleton paper had not exaggerated the flood stories. The scene is one to be remembered.

Some of the streets are still covered with water to a depth of two feet. Water flowed over the running boards of the auto. A regular river is flowing down Main Street.

New London people have taken the situation in a calm manner. Having equipped themselves with rubber boots, they travel up and down the streets as though this were a regular occurrence.

Storekeepers have had a hard time to keep the water out of their buildings. Sandbags are piled on the sidewalks to keep them from being torn up. We hope Miss — has found a dry spot.

Miss Margaret — visited our school Friday afternoon. Margaret lives at Neenah now. She says that the class colors of the eighth grade in the Washington School at Neenah are the same as our colors. They showed good taste, we think.

The eighth grade will be entertained by Miss — Tuesday while she tests their historical knowledge. Hope it's a bright day outside, and inside (our brains).

The Lincoln School has a Wireless Club. Mr. — is director. Details will be given in the next issue. We hope to get a chance to "listen in."

TAKE A LOOK-SEE

The health fairy doesn't live in a tea or coffee cup, but little folks can see one in the bottom of a glass of milk.

Uncle Abe says: Play some, think more, and work most.

MIXED FEET

A tree toad loved a she toad
 That lived in a tree;
 She was a 3-toed tree toad,
 But a 2-toed tree toad was he.
 The 2-toed tree toad tried to win
 The she toad's friendly nod;
 For the 2-toed tree toad loved the
 ground
 That the 3-toed tree toad trod;
 But vainly the 2-toed tree toad
 tried,
 He couldn't please her whim;
 In her tree toad bower, with her
 V-toed power,
 The she toad vetoed him.

Literary Digest

YOUR HOROSCOPE

If your birthday comes between March 21 and April 23, you are liable to show the following characteristics:

Positive in disposition, theoretical and animal in feeling (that is, looking to creature comforts), original. Good reasoners, natural organizers. Lean body, spare and strong; grey eyes and sandy hair. Good managers, possess foresight. Quickly offended.

"My daughter sprang from a line of peers," said the fond father.

"Well, I jumped off a dock once myself."

A sixth grade correspondent sends the following:

Did you ever see:
 A floor mop?
 An elephant pack his trunk?
 A side walk?
 A sugar bowl?
 A porch swing?

Can you tele-phone from a street car?

A cat has nine lives, but a frog croaks every day.

WHAT IS YOUR SCORE?

Tests are being given in the different school subjects these days. Have you found out what your score is in reading? In spelling? In arithmetic? Were you surprised and pleased, or just surprised? The nice thing about tests is that the scores from them tell just how far up the ladder you are compared with other boys and girls of the same grade.

How do they measure? If you piled all the papers in one pile, beginning with the lowest score and going to the highest, the score on the middle paper would be called the "median" score. Are you below the median score for your grade? What are you going to do about it? It is up to you whether the score remains at the same level, goes up and stays there, or goes down.

Testing is a sort of racing game. It is a sure race, for each one is racing with himself and so each one has a chance to win.

Thousands of school children all over the United States have taken tests, and the middle paper in all of these tests has been taken to establish a standard score for a grade. When you are standard, you are better than one half the children in the United States — but the other half are better than YOU.

The personal value of tests will not be realized if you are satisfied

with your score. Try to raise it. Get into the game. Race with your own record. Consider yourselves champions endeavoring to beat your own best. Watch your scores.

YOUR HOROSCOPE

If your birthday comes between April 23 and May 23, your nature and disposition are likely to be characterized by the following:

Positive, morose, and good students. Excellent memories, strong likes and dislikes. Handsome, rather large frame, good complexion, magnetic.

April flower	Daisy
April birthstone	Diamond
May flower	Hawthorne
May birthstone	Emerald

For Sale: Artificial sweet peas, made in any color to suit your ideas of floral beauty. Miss Edith ____

Miss Marie ____
Instructress
in
Nature, Classic,
Interpretative Dancing

Tattler Want Ads reach an exclusive clientele. If you have anything to sell or exchange, we can put you in touch with a good market at reasonable rates. If you wish to buy something, let us tell you where your want can be supplied.

Advertise!!!

Photographer, taking picture of father and son: "Young man, it would look better if you would put your hand on your father's shoulder."

Father: "I beg your pardon, sir; it would be more natural if he put his hand in my pocket."

THE STORY OF A LOST DOG

The noonday sun looked down upon a little group of people, crowded about a small tent in the midst of a circus field. An anxious look was on every face. For, within the tent, a veterinarian was fighting for the life of a little dog. The same little dog that had rescued a child from the ravages of fire only the night before. Women were softly crying. Even the air was filled with the feeling of suspense. For had not this little dog made these people, these rough men and women of the Birnsee circus, glad when they were in the depth of despair? Everything was still, then all of a sudden the tent flap was drawn aside, and the doctor stepped outdoors, saying that the dog would live. The small group dispersed, each with more happiness in his heart than had been there for hours.

Two months had gone by when, trotting along a dusty country road, alone, weary, hungry, a large rough-coated collie made his way. Forsaken, lost, friendless, he wandered; frantically looking for something to eat. Were there no friends in this sunny world? Nothing but abuse and kicks? Dimly he remembered the time when he had been beneath the

kindly and protecting care of the Birnsee circus. How his heart had thumped when he had done his tricks; but, oh, how it had leaped and throbbed when he had done his special trick, that trick he had worked so hard to perfect!

He remembered how he had watched negroes pull up the stakes, how the elephants had trudged along, how confusion had reigned, and, finally, when a big friendly collie came along, he, being tired of it all, had let him lure him away, far, far away from the circus fields. Then, when he had wanted to go back, he found the circus grounds no more a circus grounds, but a desolate field, destitute of all tents or stands. He remembered how he had gazed with terror at the empty field, how he had tried all night to find a trail, and finally, the next day, how he had set out on the same dusty, sunny road he was on now. Little he knew how his friends had rushed frantically about, looking for him at the last moment, little he knew how sorrowfully they had taken the train to the next stop. He only knew that he was lost and lonely and hungry and tired, seemingly without a friend.

At last he saw a house. There were humans. There was food. He urged his tired sore feet along. Faster and faster he ran. There, in that can, was food. The famished dog ran to it and started to eat. Then, to his surprise, came the angry tones of a man's voice. Then on his side came a kick. Oh, no — people were not that cruel. Not cruel enough to keep refuse from a starving dog! It must be a dream, an awful nightmare. He must truly be back in his own

circus kennel, with a basin of food and a basin of water and a clean, good bed. But no, he was lost, far away from home and master. He started to run and did not stop until he was far away from the house and its cruel occupant. He stopped to rest. The hot run had been too much for him. He closed his sorrowful brown eyes. But no — he was *not* beaten, he would try again.

Further on, he saw another building, much larger than the rest. To this he would go. Perhaps there was food or friends. So tired was he, at halfway there, he had to stop and rest.

The great doors were open. He walked inside. The sound of children's voices issued from behind a door. As it was ajar, he pushed it open and entered the room. Silence reigned! The appearance of a shaggy animal made them stand still — petrified with terror. With "Boy" it was different. These children were the boys and girls who, at the circus, had applauded him so much. The sight of them stirred vague memories. They had always given him things to eat when he had done his tricks. Instinct stirred him. If he did them now he would not be hungry. He started. So busy was he, he did not notice the teacher whispering to a pupil, and the boy leaving the room.

When "Boy" was done, he looked at the children. They had not moved. Disappointment surged over him! They had not liked it! Oh, why? They had always clapped so madly before! But he had not done his special trick. Oh, that would make them like him — that would make them

applaud! Stirred with a new vigor, he started. He leaped and he summersaulted, and he ran and he chased his tail, in short did everything a little dog could do. But he was very tired. He looked up. The children looked like stone images. They had not liked it — they did not feed him — they had all turned against him. Oh, but there, standing in the doorway was a policeman and the boy. The officer of the law raised his gun to fire! His finger was on the trigger. But swiftly rushing before him was a girl, crying, "Stop! Stop! Oh, stop!" With a per-

plexed expression on his face, the man lowered his revolver and asked the meaning of the interruption. The girl made haste to explain, and "Boy," his heart thumping and pounding, heard her answer, heard her tell of her going to the circus, his tricks, of how pictures of him were in all the papers. Oh, now that she had found him, she would take him back. And "Boy" knew, with a happy longing, that soon he would be back with the circus, back to his friends, back to his tricks, and back to a wonderful future!

CHAPTER XIII

FORESTRY CLUB

OUTLINE FOR STUDY

- I. How did the big forests of early days affect the economic and industrial conditions of our country?
 - A. *First Book of Forestry*, pp. 203-209
 - B. *A Primer of Forestry*, pp. 29-41
 - C. *Training of a Forester*, pp. 19-23
 - D. *Wood for the Nation*
- II. What effect on home owning did they have?
 - A. *Wood for the Nation*, pp. 147-150
- III. Where are the big forests gone?
 - A. *Timber Depletion and the Answer*, pp. 1-9
- IV. Describe our present method of logging.
 - A. *Elements of Forestry*, pp. 172-192
 - B. *Our Vanishing Forests*, p. 94
 - C. *A Primer of Forestry*, pp. 21-29
- V. Does the location of our forests have any effect upon the price of lumber?
 - A. *Our Vanishing Forests*, pp. 50, 93, 94
- VI. What part of the average man's life does it take to pay for a home?
 - A. Find average income, cost of home, size of average family, average saving.
- VII. A. Are we dependent upon our forests?
 1. Homes
 2. Railroad ties

3. Telegraph and telephone poles
4. Musical instruments
 - (a) *Elements of Forestry*, pp. 194-215
 - (b) *Our Vanishing Forests*, pp. 17, 19, 21, 24, 30, 31, 32, 34, 43, 44, 45, 46, 59, 60, 67, 70
- B. Is Appleton dependent upon the forests? In what way?
 1. *Our Vanishing Forests*, pp. 156-162
- VIII. Does the average American consume as much lumber per year as the average European?
 - A. *Elements of Forestry*, p. 5
 - B. *Our Vanishing Forests*, pp. 3, 9, 26, 27, 28
- IX. How does this affect our standard of living?
 - A. *Our Vanishing Forests*, pp. 67, 88, 97
- X. Do we raise timber as rapidly as we consume it?
 - A. *Our Vanishing Forests*, Chap. XII
 - B. *Wood for the Nation*, p. 150
- XI. Has China any lesson to teach us regarding the preserving of our forests?
 - A. *Our Vanishing Forests*, Chap. X
 - B. *Training of a Forester*, p. 26
- XII. How long does it take to grow a tree large enough to make lumber?
 - A. *First Book of Forestry*, pp. 50, 51
 - B. *Our Vanishing Forests*, pp. 140, 141, 142
 - C. *A Primer of Forestry*, Part I
- XIII. What have the European nations done to preserve their timber supply?
 - A. *Elements of Forestry*, pp. 6-14
 - B. *First Book of Forestry*, pp. 214-217
 - C. *Our Vanishing Forests*, pp. 94, 95, 96, 98
 - D. *A Primer of Forestry*, Part II, pp. 40-44

XIV. What has the United States done to preserve its timber supply?

A. *Elements of Forestry*, pp. 272-294

B. *How the Public Forests Are Handled*, pp. 309-330

C. *Our Vanishing Forests*, pp. 111-121, 122-132, 133-143, 144-155

D. *A Primer of Forestry*, Part II, pp. 44-48

XV. A. Should the United States adopt a reforestation policy? If so, what kind?

1. *Growing and Planting Hardwood Seedlings on the Farm*

2. *Our Vanishing Forests*, pp. 13, 14, 17, 21, 22, 28, 37, 49, 50, 51, 52, 53, 97, 163-171, 172-182, 183-189

3. *Timber Depletion and the Answer*, pp. 9-16

B. How can timber be saved?

1. Get builders to use more creosote-treated lumber. Half of the lumber used in the country could be profitably treated.

2. Use creosote fence posts, telephone poles, ties.

3. Substitute concrete.

(a) *Elements of Forestry*, pp. 234-240

(b) *Our Vanishing Forests*, pp. 11, 17, 20, 32, 37

(c) *Putting Wood Waste to Work*

XVI. What is the work of a forester?

A. *Our Vanishing Forests*, p. 140

B. *Training of a Forester*, pp. 30-114

XVII. What training should he have?

A. *Training of a Forester*, pp. 114-149

XVIII. Is forestry desirable as a life's work? Name the good and bad things about it.

XIX. Name the enemies of the forests — fires, etc.

A. *Elements of Forestry*, pp. 109-149

B. *Our Vanishing Forests*, pp. 26, 88, 99-109, 179-182

C. *A Primer of Forestry*, pp. 34-47

D. *Putting Wood Waste to Work*

The foregoing outline was followed throughout the year. The president assigned topics for reports. These were made in boy fashion. However, from the very beginning the pupil who reported stood in a place where the whole club could see and hear him. The report had to be good or the president or someone in the club would let him know that he had fallen down.

SECRETARY'S MINUTES

Leader — Mr. ——

President — William ——

Secretary and Treasurer — Jack ——

The Forestry Club of the year 19— was organized January 22, 19—, at eleven o'clock and adjourned at eleven forty-five. The club meets on Thursdays of every week.

A motion was made by John —— and seconded by Elmer ——, and carried, that every boy will read five books on forestry during the year or he will not be permitted to go on the trip at the end of the year.

A motion was made by Elmer ——, seconded by Charles ——, and carried, that each member should pay ten cents' dues a month.

A motion was made by Robert ——, seconded by Jack ——, and carried, that a fine of one cent should be paid for any book on forestry kept over fourteen days.

A committee was appointed to make a poster for the report on reading progress. The committee is William —— and Jack ——.

The following people were chosen to report on the following :

Wood for the Nation — Jack
A Primer of Forestry — Charles
First Book of Forestry — Carl
Training of a Forester — John
Wood for the Nation — Robert

The meeting was called to order January 29, at eleven o'clock, and adjourned at eleven forty-five.

A motion was made, and carried, that each boy should hand the secretary an outline of his topic.

A committee was appointed to secure a name for the club. Raymond — and Carl — are to act on this committee.

A committee was appointed to make a frame for the poster. John — and Colin — were appointed.

A motion was made by Elmer — and seconded by John — that a fine of five cents should be paid for dues not paid on time.

The following people are to report on topics for next week :

Where have the big forests gone? — Bob
Our Vanishing Forests — Gilbert
A Primer of Forestry — Harvey
Elements of Forestry — Carl

The meeting was called to order February 19 and was successfully held.

Elmer — handed in a very good outline of his topic.

The captain of the team was elected. William — is to be the captain.

George — reported on "Are we dependent upon our forests?" He used *Our Vanishing Forests* as a reference book, pages 17-70. George handed in a good outline. He gave a splendid topic, telling how much wood is used by railroads.

Railroads use about 500,000,000 board feet for ties, depots, and the like. He also told how much wood is used for paper.

Colin — reported on the same topic. *Elements of Forestry* was used as a reference book. He reported on how paper is made, giving four processes in making paper: (1) roller, (2) cooked in acid, (3) made into pulp, (4) into paper.

The point was proved that we could not get along without wood.

The following are to report on topics for next week:

Is Appleton dependent upon the forests? — William

Does the average American consume as much lumber as the average European? — Jack

The meeting was called to order February 26.

William — gave his topic on "Is Appleton dependent upon the forests?" He proved to us that we could not get along without the forests. We need wood for our paper mills and woodwork.

Jack — reported on "Does the average American consume as much lumber as the average European?" He proved to us that the Americans do consume more lumber than the Europeans.

The meeting was called to order April 2 at eleven o'clock and adjourned at eleven forty-five.

William — and Ray — were put out of the club on account of disorderly conduct.

Harold — gave his topic on "Situation of Forests in Europe," telling how the Europeans plant two trees when they cut one tree down. They also cut down many good trees, to let the sunshine get at the smaller trees. There are eighty-one million acres of idle land in the United States. Harold did not hand in a good outline.

Bob — gave his topic on "Situation of Forests in Europe." He told about how in the twelfth century European forests were well managed and how private owners could not cut down trees on their own property. Bob gave a good topic and handed in a good outline.

Walter — gave his topic on "Forestry in the United States." He told how in colonial times the people had to keep one acre out of every five they cleared. He told how the Presidents have put aside large tracts of land for forest reserves.

1. President Harrison set aside 13,000,000 acres of land.
2. President McKinley set aside 46,000,000 acres of land.
3. President Roosevelt set aside 194,500,000 acres of land.

Walter handed in a good topic.

A new member was added to the club, Alfred —.

The topic for next week is "What has the United States done to preserve its timber supply?" The following people are to report on it: Elmer —, Alfred —, Gilbert —, and Jack —.

The meeting was called to order April 6 at eleven o'clock and adjourned at eleven forty-five.

Elmer — gave his topic on "What has the United States done to preserve its timber supply?" He told how the government helps timber companies cut down trees to make fire paths, tells them what trees to cut and how they stop people from cutting down good trees. He told us how the government grows trees so that they can grow lumber as fast as they consume it, also that 17% of the forests in the United States are owned by private companies.

Alfred — was absent, so could not report on his topic.

Gilbert — told that the forests cover 699,500,000 acres, or more than 35% of the surface of our country. He told how

down in Mexico bandits burn acres of land and that there are 40,000,000 acres of forest land in Mexico.

Jack — was unable to give his topic. Reference book was not in library. He is to report next time.

There was no business for last week or the week before.

The trip is planned for the week around the 15th of May. We plan to go on Friday at noon and return on Saturday.

\$4.71 is reported in the treasury and about \$35.00 is needed for the trip.

Two topics are left over for next week on the subject "What is the United States doing to preserve its timber supply?" Jack — and Alfred —.

There are two people to pay dues for February and six for the month of March and twelve for the month of April.

Since some have been put out of the club and some are coming in there are now seventeen in the club. If some don't come to order the population of the club will come down.

Topic for next week is "Should the United States adopt a reforestation policy? If so, what kind?" Carl —, Colin —, and George — are to report on this topic.

The pages immediately following include brief shorthand reports of a few meetings.

President called the meeting to order at eleven o'clock. The secretary called the roll and read the minutes of the last meeting. The president then called for any new business. It was reported that a forestry camp is to be opened in Vilas County, in Wisconsin. It was also reported that the Salesmanship Club is to have a candy sale and it was suggested that the Forestry Club help them, by buying candy.

The topic for to-day is "Put the idle lands to work."

Forest lands not needed for agriculture should not be allowed to be idle but should be kept at work growing timber.

The public should aid the forest owner to grow trees, the chief thought being that the forest owner should grow trees but you should give him fair and reasonable help in doing it.

Question: If a forest owner grows trees, could he be taxed?

Answer: He could be taxed on the growing trees. The farmers use 50% of all lumber used in the United States, for fences, barrels to ship goods, buildings and improvements, etc.

Question: If there was to be a decrease in lumber, who would feel it the most, the farmer or the paper maker?

Answer: The paper maker needs the wood to make pulp but the farmer's loss would be greater because he cannot get along without lumber.

Question: If the farmer is having a hard time, how does it affect business in the United States?

Answer: The farmer is the greatest producer in the United States. He keeps the manufacturers alive and in business. The farmer is also the greatest consumer. He consumes about 50% of the manufactured products of the country. The farmer owns one-half of all the timber.

Question: Can you make trees grow faster than they grow now?

Answer: 1. Clean up the underbrush.

(a) Give trees more strength.

(b) Trees will have more chance to grow.

(c) Sunlight and air.

2. Fertilize the land.

Question: What does the public control of forests mean?

Answer: It means that the public is to control the forests.

The farmers are to give land over to the government.

The president called the meeting to order at eleven o'clock.

The secretary read the minutes of the last meeting and called the roll.

The new business for the day was as follows: Wilder — brought an encyclopedia with an article "From a Logging Camp to a Sawmill." He suggested that all the boys read it.

New sergeant at arms was appointed: Alfred —.

A motion was made that if the sergeant at arms has to call any member to order that person is to pay a fine of two cents. The motion was lost.

A motion was made to draw up a constitution.

The following committee was appointed: Sterling, Clement and Lawrence.

The topic for to-day is "Growing and Planting Hardwood Seedlings on the Farm."

The following questions were asked and the answers given:

Question: Why do these trees die?

Answer: The soil is not good and the right kind of trees are not planted.

Question: What trees cannot be planted together?

Answer: Black locust and chestnut cannot be planted together.

Question: What is the advantage of planting together?

Answer: To save the bank from washing away.

Question: Where should windbreaks be put to protect the crops?

Answer: Windbreaks should be put on the south and west side. Summer winds are most damaging to crops.

Question: Can you transplant walnut, hickory, and oak trees very easily?

Answer: No, it takes too long to grow them. The planting of nuts or acorns is the best way.

Question: What is a mattock?

Answer: A mattock is a pickax-like tool having blades instead of points.

Question: What time of the year is most preferable for planting?

Answer: Spring.

Question: What kinds of seeds are planted in the so-called "seedspot" method?

Answer: Oak, hickory, black walnut, and butternut are planted this way.

Question: On what conditions can trees be spaced closely?

Answer: Trees cannot be spaced closely unless irrigation is possible.

Question: Whom should you consult before planting trees?

Answer: The State Forester.

The president called the meeting to order at eleven o'clock. The secretary read the minutes of the last meeting and called the roll.

New business for to-day: It was suggested that we subscribe to a magazine. A motion was made to plant a tree on Arbor Day. The motion was carried.

Questions asked to-day:

Question: What is the reason for soaking the seeds and heating to almost a boiling point?

Answer: Seeds will germinate faster.

Question: When should you stop watering the seeds?

Answer: You should stop watering seeds after midsummer.

Question: What is the reason for this?

Answer: This is done so that the seeds will harden up properly before the fall frosts.

Question: Why do you want to keep mice away from the seeds?

Answer: Because they will eat the seeds.

Question : What is meant by pruning?

Answer : Trimming the trees.

Question : Why do seeds have to have both shade and sunlight?

Answer : In order to grow ; the sun provides warmth for growth, and the shade protects from heat.

Question : How long does it take an ordinary tree to grow?

Answer : Twenty-five years.

The president called the meeting to order at eleven o'clock. The secretary called the roll and read the minutes of the last meeting.

A trip to Door County to the State Forest Park was planned. Mr. ——— donated \$5.00 towards the trip and Dr. ——— donated \$10.00. It was suggested that we write letters to the people who donated the money for the trip.

The following is a list of questions which the club prepared to ask Mr. ——— when they arrived at the State Forest Park :

Is fertilizer put on the land when a tree is set out?

How deep should a tree be planted?

How long does it take for trees which are set out to become big enough for timber?

Which is the best way to plant little trees or seeds?

How are trees cared for after planting?

What diseases spoil the trees?

What trees grow best?

What time of the season is best for planting?

How much water does a tree need to keep it growing?

What time of the year does a tree grow the most?

What birds are best to have in the forest?

Is it possible to reforest Wisconsin so that it can supply its own timber?

A motion was made and carried to appoint three members to write letters to the following :

George ——

Mike ——

Mr. ——

Mr. ——

Dr. ——

Mr. ——

REFERENCES AND MATERIALS

One of the difficulties is to get the right kind of reading material. But after one is started new sources of supply continually present themselves. The American Tree Association, Washington, D. C.; State Packet Libraries, University of Idaho, Moscow, Idaho; Minnesota State Forestry Board; University of Washington, Seattle, Washington; Wisconsin Forest Products Laboratory, Madison, Wisconsin; and the United States Department of Agriculture, Washington, D. C., can furnish a bountiful supply of material at low cost.

The following circulars from the Department of Agriculture are very helpful. Most of them can be secured through your Congressman.

Dana, Samuel T.: *Putting Wood Waste to Work*, 1920

Graves, Henry S.: *A Policy of Forestry for the Nation*, Circular 148, 1919

Greeley, W. B.: *Government Forest Work*, Circular 211, 1924

Greeley, W. B.: *Timber Depletion and the Answer*, Circular 112, 1920

Greeley, W. B.: *Wood for the Nation*, 1920

Greeley, W. B., and others: *Timber: Mine or Crop?* Bulletin 886, 1923

Mattoon, Wilbur R.: *Forestry and Farm Income*, Bulletin 1117, 1923

Mattoon, Wilbur R., and Dille, Alvin: *Forestry Lessons on Home Woodlands*, Bulletin 863, 1920

- Moore, Walter M., and Jackson, Edwin R.: *Forest Nurseries for Schools*, Bulletin 423, 1910
- Pinchot, Gifford: *A Primer of Forestry*, Part I, Bulletin 173, 1917
- Pinchot, Gifford: *A Primer of Forestry*, Part II, Bulletin 358, 1917
- Reynolds, R. V., and Pierson, A. H.: *Lumber Cut of the United States — 1870-1920*, Bulletin 1119, 1923
- Smith, Herbert A.: *Forest Products Laboratory*, 1922
- Smith, Herbert A.: *Forests and Forestry in the United States*, 1922
- Smith, Herbert A.: *How the Public Forests Are Handled*, 1920
- Smith, Herbert A.: *The United States Forest Service*, 1922
- Tillotson, C. R.: *Care and Improvement of the Farm Woods*, Bulletin 1177, 1924
- Tillotson, C. R.: *Growing and Planting Hardwood Seedlings on the Farm*, Bulletin 1123, 1922
- Measuring and Marketing Farm Timber*, Bulletin 1210
- Production of Lumber, Lath, and Shingles in 1918*, Bulletin 845

The following circulars and books are helpful also:

Minnesota State Forest Service:

- Anderson, O. P.: *Minnesota State Forestry Board — The Forest Service*, 1920
- Anderson, O. P.: *Minnesota State Forestry Board — Suggestions for Planting Trees*, 1920
- Cox, W. T.: *Forest Protection and Conservation in Minnesota*, 1922
- Annual Report of the Minnesota State Forestry Board to the Governor*, 1922

The Forest Club, University of Washington, Seattle, Washington:
Official Report of Forest Conference to the Governor and the Legislature of Washington

University of Wisconsin, Forest Products Laboratory, Madison, Wisconsin:

- List of Forest Service Pamphlets on Glue, Plywood, and Coatings
- List of Pamphlets Relating to the Structure and Identification of Wood
- Technical Notes

Associated Foresters, University of Idaho, Moscow, Idaho:

The Idaho Forester

Idaho Forestry Bulletin

The American Tree Association, Washington, D. C.:

Nature Study Bulletin

Our Program

Town Forests

Superintendent of Documents, Washington, D. C.

Forestry: Tree Planting, Wood Tests, and Lumber Industries

Books:

Moon, F. F., and Brown, N. C.: *Elements of Forestry*, John Wiley and Sons

Pack, Arthur N.: *Our Vanishing Forests*, The Macmillan Company

Pack, C. L.: *School Book of Forestry*, American Tree Association, Washington, D. C.

Pack, C. L.: *Trees as Good Citizens*, American Tree Association, Washington, D. C.

Pack, C. L., and Gill T.: *Forest Facts for Schools*, The Macmillan Company

Pinchot, Gifford: *Training of a Forester*, J. B. Lippincott Company

Roth, F.: *Michigan Manual of Forestry*, George Wahr, Ann Arbor, Michigan

Besides the content material we aimed to induce the boys to read good books. The following books were purchased for the club because the material seemed good and had to do with the out-of-door life:

Altsheler, J. A.: *The Forest Runners*, D. Appleton and Company

Beard, D. C.: *American Boys' Handybook of Camp-lore and Woodcraft*, J. B. Lippincott Company

Beard, D. C.: *The Field and Forest Handy Book*, Charles Scribner's Sons

Brooks, Noah: *The Boy Emigrants*, Charles Scribner's Sons

Brooks, Noah: *The Boy Settlers*, Charles Scribner's Sons

- Bruce, H. Addington: *Daniel Boone and the Wilderness Road*, The Macmillan Company
- Caldwell, F.: *Wolf, the Storm Leader*, Dodd, Mead and Company
- Chambers, Mary D.: *Nature Secrets*, Atlantic Monthly Press
- Chapman, Allen: *The Radio Boys with the Forest Rangers*, Grosset and Dunlap
- Cheley, F. H.: *The Boy Scout Trail Blazers*, Barse and Company
- Gregor, E. R.: *Jim Mason, Backwoodsman*, D. Appleton and Company
- Grey, Zane: *The Young Forester*, Grosset and Dunlap
- Henderson, O.: *Jungle Roads and Other Travels of Roosevelt*, E. P. Dutton and Company
- Lange, D.: *Good Times in the Woods*, Newson and Company
- London, Jack: *The Call of the Wild*, The Macmillan Company
- Rolt-Wheeler, Francis: *The Boy with the U. S. Foresters*, Lothrop, Lee and Shepard Company
- Sabin, E. L.: *Pluck on the Long Trail*, Thomas Y. Crowell Company
- Theiss, L. E.: *The Young Wireless Operator — as a Fire Patrol*, W. A. Wilde Company
- Wallace, D.: *Grit-A-Plenty*, Grosset and Dunlap

REPORT OF BOOKS READ BY INDIVIDUAL MEMBERS DURING THE YEAR

Each boy was given a square on a chart. When he took a book the title of it was written under his name. When he had finished reading it and reported on it a star was placed after the title.

CHARLES

*Jim Mason, Backwoodsman**
*Grit-A-Plenty**
*The Young Forester**
*The Forest Runners**
*Pluck on the Long Trail**
*Daniel Boone and the Wilderness Road**

BOB

*The Boy Scouts in the Wilderness**
*The Radio Boys with the Forest Rangers**
*The Boy with the U. S. Foresters**
*The Young Forester**
*The Forest Runners**
*Jim Mason, Backwoodsman**

CHARLES

*The Radio Boys with the Forest Rangers**
*The Boy Settlers**

BOB

*Pluck on the Long Trail**
*The Boy Scout Trail Blazers**
*The Call of the Wild**
*The Young Wireless Operator — as a Fire Patrol**
*The Young Lion Hunter**
*Good Times in the Woods**
*Wolf, the Storm Leader**
*The Boy Emigrants**
*Grit-A-Plenty**
*Daniel Boone and the Wilderness Road**

WILLIAM

*Grit-A-Plenty**
*The Radio Boys with the Forest Rangers**
*The Boy Scout Trail Blazers**
*The Young Forester**
*Pluck on the Long Trail**
*The Young Lion Hunter**
*Good Times in the Woods**

JACK

*The Boy Settlers**
*The Boy Scouts in the Wilderness**
*The Boy with the U. S. Foresters**
*The Radio Boys with the Forest Rangers**
*The Training of a Forester**
*The Young Forester**
*Daniel Boone and the Wilderness Road**

CARL

*Pluck on the Long Trail**
*Jim Mason, Backwoodsman**
*The Boy Scout Trail Blazers**
*The Boy with the U. S. Foresters**
*The Forest Runners**
*The Boy Scouts in the Wilderness**
*The Young Forester**
*The Boy Settlers**
*The Boy Emigrants**
*The Radio Boys with the Forest Rangers**
*The Young Wireless Operator — as a Fire Patrol**
*Grit-A-Plenty**
*Wolf, the Storm Leader**
*The Call of the Wild**

ROBERT

*The Field and Forest Handy Book**
*The Young Forester**
*The Call of the Wild**
*The Forest Runners**
*Wolf, the Storm Leader**
*Grit-A-Plenty**
*The Boy Scouts in the Wilderness**
*Jim Mason, Backwoodsman**
*The Boy Settlers**
*The Young Lion Hunter**
*The Boy Scout Trail Blazers**
*The Boy Emigrants**
*The Radio Boys with the Forest Rangers**
*The Young Wireless Operator — as a Fire Patrol**

ELMER

*The Boy Scout Trail Blazers**
*The Boy Scouts in the Wilderness**
*The Forest Runners**

CHARLES

*Pluck on the Long Trail**
*Grit-A-Plenty**
*Wolf, the Storm Leader**

ELMER

*The Boy with the U. S. Foresters**
*The Radio Boys with the Forest Rangers**
*Pluck on the Long Trail**
*The Young Wireless Operator — as a Fire Patrol**

RAY

*The Radio Boys with the Forest Rangers**
*The Young Forester**
*The Call of the Wild**
*The Forest Runners**
*The Boy Settlers**

ROLAND

*The Forest Runners**
*Jim Mason, Backwoodsman**

GEORGE

*The Young Forester**
*Pluck on the Long Trail**
*The Radio Boys with the Forest Rangers**
*The Boy Scout Trail Blazers**
*The Young Lion Hunter**
*The Forest Runners**
*The Boy with the U. S. Foresters**

HARVEY

*Good Times in the Woods**
*Wolf, the Storm Leader**
*The Call of the Wild**
*Grit-A-Plenty**
*The Young Forester**
*The Young Lion Hunter**
*The Forest Runners**

JOHN

*Good Times in the Woods**
*The Radio Boys with the Forest Rangers**
*Wolf, the Storm Leader**

VINCENT

*Wolf, the Storm Leader**
*The Radio Boys with the Forest Rangers**
*The Forest Runners**
*The Boy Scout Trail Blazers**
*Jim Mason, Backwoodsman**
*The Boy Scouts in the Wilderness**
*The Young Forester**

COLIN

*The Wireless Operator — as a Fire Patrol**
*The Boy Scout Trail Blazers**
*The Boy Scouts in the Wilderness**
*The Radio Boys with the Forest Rangers**

HAROLD

*Wolf, the Storm Leader**
*The Boy Scout Trail Blazers**
*Good Times in the Woods**
*The Radio Boys with the Forest Rangers**
*Pluck on the Long Trail**

GILBERT

DALE

*The Wireless Operator — as a Fire Patrol**

*The Call of the Wild**

*The Young Forester**

*Pluck on the Long Trail**

*The Boy Scouts in the Wilderness**

*The Young Forester**

*Wolf, the Storm Leader**

*The Radio Boys with the Forest Rangers**

*The Forest Runners**

*Good Times in the Woods**

*The Young Wireless Operator — as a Fire Patrol**

*The Boy Scouts in the Wilderness**

*The Boy Scout Trail Blazers**

*Grit-A-Plenty**

*The Call of the Wild**

*The Young Lion Hunter**

JOHN

ALFRED

*Good Times in the Woods**

*Daniel Boone and the Wilderness Road**

*Pluck on the Long Trail**

*The Radio Boys with the Forest Rangers**

*The Boy Scouts in the Wilderness**

*The Young Forester**

*The Call of the Wild**

*The Boy Scout Trail Blazers**

*The Boy Scouts in the Wilderness**

PAPER FROM THE FORESTRY CLUB

What Timber Means to Appleton

The city of Appleton depends upon timber for its existence. If it cannot get pulpwood to run the numerous paper mills in Appleton and vicinity, the mills will have to move to a place where there are lots of trees and where they can grow easily. The moving of these mills means very much to Appleton, for fifty per cent of her working men are employed in the paper mills. . . . If the mills move it will affect iron factories, railroads, and other industries, thus taking away more people. . . .

The reason our forests have gone so extensively is that the people, in a mad rush west, cut down and burned thousands of

acres of trees just to get them out of the way to make a road through the wilderness and start industries. They never thought of what would happen to the forests if this was carried on very long. The lumbering industry and the destruction of merchantable timber consume 52 billion board feet yearly. About 40 billion feet of this is cut from virgin forest still left, and the rest from second growth. We are taking about 26 billion feet yearly and growing 6 billion feet. We are cutting more of every class of timber than we are growing. This and other waste of timber was carried on so that we haven't enough timber to supply our needs. We now have in the United States enough timber to last 25 or 30 years, at the rate it is being used now. It wouldn't last that long if we didn't import some from foreign countries.

Canada is still very thickly forested. Mills are buying large tracts of land there.

Most of our pine, the last few years, has come from the pine forests of the South.

One-half of the remaining forests in the United States are in the three Pacific states and sixty per cent west of the Great Plains.

Since 1894 timber has been filling gaps in Eastern and Middle Western markets. Within 25 years the United States will have to import lumber entirely unless something is done to check the timber waste. Two-thirds of our pulpwood is imported from Canada, where at times it is so cold that men dare not go out for fear of freezing.

Shipping timber is so costly that the mills have to move nearer forest lands or be at a disadvantage with other mills. When timber was plentiful it cost \$15 or \$20 per thousand feet but now it is \$80 to \$85. The railroad rates add another \$10 or \$15, which together total \$95 per thousand board feet.

There are thousands of acres of wasteland up North that are

suitable only for timber growing but nobody takes interest enough to reforest them. The high cost of timber affects home building and other building. It takes much timber to build a home and it takes a third or more of a man's life to save enough money to build a modern six-room house. It costs six or seven thousand dollars to build a house of that kind. With the thought of the destruction and waste of our forests in view, what is to become of Appleton?

CHAPTER XIV

NURSES' CLUB

OUTLINE OF SUBJECT MATTER

I. Organization

A. Election of officers

B. Purpose of club

1. To interest further those who have chosen this club by giving

- (a) Short résumé of history of nursing
- (b) Information that is worth having
- (c) Account of opportunities open to nurses
 - (1) Public
 - (2) Private
 - (3) Institutional
- (d) Brief summary of outstanding nurses
 - (1) Florence Nightingale
 - (2) Clara Barton
 - (3) Lillian Wald

2. To provide subject material for individuals in class, who will present it

C. Bibliography

1. Bolton, S.: *Lives of Girls Who Became Famous* (Florence Nightingale and Clara Barton), Thomas Y. Crowell Company
2. Dock, L. L., and Stewart, I. M.: *Short History of Nursing*, G. P. Putnam's Sons

3. Gardner, Mary Sewall: *Public Health Nurse*,
The Macmillan Company
4. Parkman, Mary R.: *Heroines of Service*
(Clara Barton), The Century Com-
pany

II. Personal Hygiene

A. Cleanliness

1. Mind

2. Body

(a) Care of teeth; foods that make strong bones; necessity of visiting dentist once a year

(b) Baths — cold and hot

(c) Elimination

(d) Care of hands and nails

3. Clothing

4. Foods — kinds

5. Coughing and sneezing

6. Dangers of spitting

7. Dangers of public toilets and fountains

B. Pure air — ventilation and temperature

C. Activity

1. Work

2. Rest; number of hours' sleep — under what conditions

3. Play — kind

D. Cosmetics

1. Use and dangers

E. Posture — correct and result of poor

F. Care of eyes

G. Bibliography

1. Baker, S. J.: *Child Hygiene*, Harper and Brothers

2. Blount, R. E.: *Health as a Heritage*, Allyn and Bacon
3. Rosenau, M. J., and others: *Preventive Medicine and Hygiene*, D. Appleton and Company
4. Winslow, C. E.: *Healthy Living*, Charles E. Merrill Company

III. Choice of patient's room

- A. Comfort of patient
 1. Mentally
 2. Physically
- B. Location — so that it is convenient for person caring for ill person (near bathroom, etc.)
- C. Lighting, heating, and ventilation
- D. Desirability of little furniture
- E. Attractiveness of room
 1. Wall paper
 2. Color
 3. Consideration of likes and dislikes of the individual
- F. Location so as to be away from noise and kitchen odors
- G. Bibliography:
 1. Maxwell, A. C., and Pope, A. E.: *Practical Nursing*, G. P. Putnam's Sons
 2. *Girl Scout Manual*, Girl Scouts, Inc., 670 Lexington Ave., New York City

IV. Bed making

- A. Essentials necessary to consider before start
 1. Room must be warm
 2. Clean linen must be in the room
- B. Demonstration
 1. With patient
 2. Without patient

C. Care of

1. Blankets
2. Sheets and linen
3. Mattress

D. Discussion of kinds of beds

1. Hospital — advantage
2. Home — advantage

E. Technique of bed making

1. Pulling sheets tight
2. Brushing out crumbs
3. Advantages of square corners
4. Necessity of having bed clothes right length

F. Bibliography

1. Maxwell, A. C., and Pope, A. E.: *Practical Nursing*, G. P. Putnam's Sons
2. *First Aid Manual*, American National Red Cross, Washington, D. C.

V. Bed bath

A. Necessity of having all things needed in the room before starting

1. Fresh linen — for bed, patient, and bath
2. Toilet articles
 - (a) Soap
 - (b) Water
 - (c) Alcohol and powder
 - (d) Comb and brush
 - (e) Tooth brush
3. If patient is able to be up while bed is made
 - (a) Kimono
 - (b) Slippers
 - (c) Comfortable chair
 - (d) Blankets and pillows
4. Right temperature

- B. Carefully chosen conversation at all times
- C. Practice by students themselves after demonstration
- D. Bibliography
 - 1. Maxwell, A. C., and Pope, A. E.: *Practical Nursing*, G. P. Putnam's Sons
 - 2. *Girl Scout Manual*, Girl Scouts, Inc., 670 Lexington Ave., New York City
 - 3. *First Aid Manual*, American National Red Cross, Washington, D. C.

VI. Temperature, pulse, and respiration

- A. Five ways for taking temperature and reasons for so doing
 - 1. Normal temperature
 - 2. How to read thermometers
- B. Normal pulse
 - 1. Where found — three places
 - 2. Of —
 - (a) Infants
 - (b) Adolescents
 - (c) Adults — variance of men and women
- C. Respiration
 - 1. Definition
 - 2. How to count
- D. Relation of the three to each other
- E. Bibliography
 - 1. Same as for preceding lesson

VII. Qualities we should acquire

- A. Good disposition
- B. Pleasing personality
- C. Ability to observe
- D. Obedience
- E. Neatness

- F. Punctuality
- G. Sympathy and understanding
- H. Kindness
- I. Tact
- J. Education
- K. Quiet manner
- L. Quickness

The students will suggest these qualities themselves.

VIII. Accidents and common ills — treatment

- A. Headache
 - 1. Rest
 - 2. Fresh air
 - 3. Physic — simple
- B. Stomach ache
 - 1. Rest
 - 2. Heat
 - 3. Cathartic
 - 4. Soda and water
- C. Colds
 - 1. Keep away from other people
 - 2. Observe other treatment above
- D. Burns caused by :
 - 1. Steam — soda, lard, butter
 - 2. Electricity — carron oil, etc.
 - 3. Water — soda, lard
 - 4. Acid — butter, grease
 - 5. Fire — carron oil, etc.
- E. Removing foreign body from eye
 - 1. Demonstrate
- F. Simple cuts
 - 1. Mercurochrome
 - 2. Wet bandage of chlorazene solution

G. Sprain

1. Soak in hot water if possible
2. Bind tightly
3. Keep sprained parts immovable

H. Nose bleed

1. Lay patient flat on back, arms over head
2. Cold water on nose
3. Piece of paper under lip
4. Cold knife to back of neck

I. Faint

1. Lay patient flat on back without pillow
2. Cold compress to forehead
3. Loosen tight clothing about neck and waist
4. Plenty of air
5. Cover
6. Smelling salts

J. Sore throat

1. Stay at home and keep away from crowds
2. Gargle with warm water and salt

K. Bibliography

1. *First Aid Manual*, American National Red Cross, Washington, D. C.
2. Winslow, C. E.: *Healthy Living*, Charles E. Merrill Company

IX. Artificial respiration

- A. Kinds and use
- B. Demonstration
- C. Practice

X. Bandaging

- A. Kinds
 1. Roller
 2. Triangular — use of slings and how to make and apply them

- B. Uses
- C. Demonstration
- D. Practice
- XI. Visit to milk company
 - A. Saw how and where milk was pasteurized
 - B. Detailed information was given about milk from time it left the farmer to the time it reached the consumer
- XII. Visit to hospital
- XIII. Visit to Fire Department
 - A. Saw the pulmotor
 - B. Learned when and how it is used
- XIV. Introduction to infant care

Bibliography

- Baker, S. J.: *Child Hygiene*, Harper and Brothers
- Bolton, S.: *Lives of Girls Who Became Famous*, Thomas Y. Crowell Company
- Cook, Edward: *A Short Life of Florence Nightingale*, The Macmillan Company
- Gulick, L. H.: *Emergencies*, Cinn and Company
- Hasbouck, Gertrude, and Morgan, Mary: *Manual of Infant Hygiene*, State Board of Health, Madison, Wisconsin
- Hutchinson, W.: *Preventable Diseases*, Houghton Mifflin Company
- Jewett, Frances G.: *The Next Generation*, Ginn and Company
- Maxwell, A. C., and Pope, A. E.: *Practical Nursing*, G. P. Putnam's Sons
- Parkman, Mary R.: *Heroines of Service*, The Century Company
- Payne, E. G.: *Education in Accident Prevention*, Lyons and Carnahan
- Payne, E. G.: *Education in Health*, Lyons and Carnahan
- Rosenau, M. J., and others: *Preventive Medicine*, D. Appleton and Company

Wald, Lillian : *House on Henry Street*, Henry Holt and Company
Winslow, C. E. : *Healthy Living*, Charles E. Merrill Company
Girl Scout Manual, Girl Scouts, Inc., 670 Lexington Ave., New
York City
First Aid Manual, American National Red Cross, Washington, D. C.

WEEKLY REPORTS

Weekly Report of Nurses' Club
Leader _____

Date Jan. 29

1. Plan for next week

Short review of preceding lesson with any additional material on that lesson. The new lesson will be on bed making.

2. To-day's aim

To show that great care should be taken in choosing a room (if there is a choice) for a patient and that the patient and his welfare should be considered

3. Method

Questions and answers from the girls in charge of the meeting together with a report on material found from readings assigned

4. Report of work accomplished

(a) Good questions asked

What exposure should be chosen for an invalid?
Why?

(b) Good contributions

(c) Books read and amount of reading done

Practical Nursing, Girl Scout Manual, First Aid Manual

(d) Report of what was done

The meeting was called to order by the president and the roll was taken. One new member joined the club. The secretary read the minutes of the last meeting. They stood approved. Before the business of the day was taken up there was a motion made and seconded that each girl bring three cents a week as dues, which would later pay car fare in making trips to various places that have a definite relation to the course. The girls decided that a southwest room would be most desirable because there would be sun most of the day (except in the summer, when they felt it might be too warm). A southeast room was suggested, but someone said that that might annoy one who is ill, for the sun would rise too early and the morning was or did not seem as long as the afternoon to a person in bed. They suggested that the room be the quietest, and free from kitchen odors, and located as near the bathroom as possible. There was considerable discussion on the wall paper used; the color must be restful to the eyes, and the design such that it will have a desirable influence on the mind of the patient. Regarding ventilation, they felt sure that a double exposure would aid this, although they were careful to mention that there should not be a draft on the patient and the ways and means they would use to prevent such a thing occurring. Special stress was given to the use of blankets, chairs, and the like to be used in place of screens in the house where the latter are not available. We made the lesson practical and gave in detail substitutes that may be used in the home.

Weekly Report of Nurses' Club
Leader _____Date Feb. 5

1. Plan for next week

How to make a bed with a patient and without a patient.

Articles necessary in doing this and in giving a bath

2. To-day's aim

(a) Teach the correct way to make a bed

(b) Have pupils understand why certain kinds of beds, mattresses, and bedding are desirable

3. Method

(a) Reading

(b) Questions

(c) Demonstrations

4. Report of work accomplished

(a) Good questions asked

Why should the patient's bed be high?

What kind of mattress should a patient have?

What kind of bedding should be used?

(b) Good contributions

(c) Books read and amount of reading done

Practical Nursing

(d) Report of what was done

The business meeting was finished in a short time.

There was a brief discussion on ventilation. Then the topic for the day was started by the three girls who were chosen the week previous. They started discussion by the use of questions. The girls were thoroughly interested in the demonstration. Questions were asked which showed the girls were thinking.

Weekly Report of Nurses' Club

Leader _____

Date Feb. 12

1. Plan for next week

- (a) Demonstration of bed bath; essentials necessary
- (b) Correlation of new and old lesson

2. To-day's aim

Making bed with patient in it; care of patient; combing hair; turning patient (frequently — reasons)

3. Method

Demonstration

Questions asked of the class by those in charge of the lesson

4. Report of work accomplished

- (a) Good questions asked
- (b) Good contributions
- (c) Books read and amount of reading done

Practical Nursing

(d) Report of what was done

Meeting was called to order by the president and the minutes of the last meeting read and accepted. A — E — had read an article on chlorine gas — its use and advantages — in the *Review of Reviews* for January, from which she gave an interesting report. Some of the girls had heard of the treatment being successfully used, and others said they knew of cases where it had not helped. G — P — asked questions of the class directly relating to the subject. A demonstration followed. The members of the class participated in turn. It was satisfying to know that so many of the group had practiced that which

they learned the week before. Questions asked showed that the girls had observed, when they had a chance, the care given sick folks. The meeting was most businesslike, and all the girls were there to get *all* they could. The dues were paid and the meeting adjourned at 11:45.

Weekly Report of Nurses' Club

Leader _____

Date Feb. 26

1. Plan for next week

- (a) How to take temperature, pulse, and respiration — normal and abnormal
- (b) How to amuse the sick — the necessity of carefully choosing conversation
- (c) Review questions on preceding lesson

2. To-day's aim

Definitely demonstrate the value of a bed bath and the way it should be given

3. Method

Demonstration, questions

4. Report of work accomplished

- (a) Good questions asked
- (b) Good contributions
- (c) Report of what was done

Meeting called to order by the president. (I had to be out of the room for several minutes at eleven o'clock. The roll was called and the meeting went on just as though I had been in the room. This pleased me much.) The minutes of the last meeting were read and accepted. G — P — and R — P — had charge of the lesson. They asked ques-

tions which led to the demonstration and made the girls think of how and why things should be done. After the bath was given, the preceding lesson was reviewed by giving the class in turn the opportunity of making the bed with the patient in it. While they worked they explained what they were doing and why. This helped prove to me that they had really learned something. Each girl seemed most interested and was anxious to do her best.

Weekly Report of Nurses' Club
Leader _____

Date Mar. 5

1. Plan for next week

Common ills and their treatment; emergencies

2. To-day's aim

To show the relation of pulse, temperature, and respiration to health of individual; the reason why we have them

3. Method

Questions, illustration

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Respiration defined by one of the girls after she took a breath — inhalation and exhalation of air

(c) Books read and amount of reading done

(d) Report of what was done

Meeting called to order by the president. Roll called and the minutes of the last meeting read. Because the time went so fast we neglected to choose anyone to have charge of the meeting. H — S — gave

a report she had read on cleanliness, "Germs and Their Spread." We discussed in detail the meaning of temperature of the body; the normal temperature and where it might be taken; the reason for taking it in various places; the advantage of one over the other; and what a rise in temperature might mean. The normal pulse and respiration of different aged groups were discussed. The girls found the various places that a pulsation was found and we listed them. They asked why pulses differed so in the young and old and we listed them. They asked the reasons for normal and abnormal pulsations. A discussion followed. They learned how to take a pulse and count respiration; the significance of each and how they are related to temperature. The meeting adjourned at 11:45.

Weekly Report of Nurses' Club
Leader _____

Date Mar. 12

1. Plan for next week

Common ills and their treatment; emergencies (*continued*)

2. To-day's aim

To show the variance of pulse and respiration in even the small group; some of the common emergencies and ills which are often necessary to meet — prevention and treatment of them

3. Method

Questions and narrative reports of experiences some may have had

4. Report of work accomplished

(a) Good questions asked

Why isn't it good to throw water on a burn?

What is the object of irrigating the eye after acid injury?

- (b) Good contributions
- (c) Books read and amount of reading done
- (d) Report of what was done

The meeting was called to order; the minutes of the previous meeting read and approved. After showing a picture of the range of pulses and respirations of the entire group on the blackboard, a discussion on the subject was held. Following this the topic changed to some of the common accidents in the home and their cause and treatment.

The following suggestions were made as good materials to use for burns: carron oil, soda bicarbonate paste, lard, butter, cold cream, vaseline, sweet oil, kerosene, and flour. One of the girls told of an experience her father had. His arm was scalded. One of his coworkers threw cold water on it. This made the condition much worse. This made a lasting impression on the girls. Acid burn of the eye was discussed. It was decided that clean lukewarm water as an irrigation was proper to use immediately, before even calling a doctor. It was decided that a doctor should always be consulted when an accident of that kind occurs. The time was gone when we had gone only this far; so the meeting was adjourned.

Weekly Report of Nurses' Club
Leader _____

Date April 2

1. Plan for next week

Demonstration of the baby's bath

2. To-day's aim

Show the reasons and need for proper care

3. Method

Example of children who have suffered both mentally and physically because of unintelligent care

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

The girls spoke of seeing babies and small children in the movies and on the street at night. They gave reasons why they thought that was bad.

(c) Books read and amount of reading done

(d) Report of what was done

The girls were shown how important it is for a child to have a good start in life. The baby and his start in the world were compared to the foundation of a building. The baby is about as helpless as anyone could be and wholly dependent on those who care for him. It surely does not seem fair that a baby should be brought into the world and be given unintelligent care and later suffer both mentally and physically because of it. All babies have a right to intelligent care and it was decided that it is up to us to do our share in helping to propagate such a plan. Unintelligent care is partly due to ignorance or lack of education. "It is safer, kinder, easier, and cheaper to keep a baby well and healthy than to cure him after he is sick or defective."

The following is a report taken by a stenographer at a Nurses' Club meeting:

Feb. 15

Children bandaged one another.

Spiral bandage of forearm

Start at wrist, anchor, and work upward. Hold at same place and flop at same spot each time. Don't cover elbow, but anchor above elbow.

Two children did the finger bandage.

Questions asked :

Are you comfortable? Yes or no.

Demonstration :

Fractured elbow explained. Temporary bandaging until a doctor's help is available was demonstrated.

Gauze or cloth, for bandaging, cut in long strips, about two inches wide, two yards long. Pad both ends of splint. Start dressing at elbow and go up. Then work down. Pad lower end of splint and all prominences.

Discussion for next time : Sling, tourniquet

May 17

In reviewing the year's work the students asked each other the following questions :

Question : What would you do if you were out on a lonely road and the person you were with was bitten by a snake?

Answer : First suck the poison from the wound and spit it out. Then tie something above the wound so that the poison will not get into the body. Then take the person to some place for medical aid.

Question : If you were riding in an airplane and it went into a nose dive and hit the ground and the person you were with was knocked unconscious, what would you do?

Answer : Take the person out of reach of the gasoline tank, as that is liable to explode. Take him about 25 yards away. Lay him down and prop his shoulders up, not his

head. If there are any open bleeding cuts, apply the tourniquet above them. His skull may be fractured; so it is best to take him to a doctor as soon as possible.

Question: Tell four different plasters, how to make them, and how to put them on.

Answer: *Flaxseed*: Flaxseed, hot water, and flour. Mix well. Boil and when it becomes slimy put on a cloth and then cover with another cloth and then apply it to skin. Oil the cloth before applying the plaster. When the skin becomes red take the plaster off.

Mustard: Take two tablespoons of mustard, one-half cup flour, and hot water. Then put on stove and boil until a paste is formed. Then put on cloth and cover with another cloth and apply on chest. Oil cloth before applying application. Look every three or five minutes to see if chest is red and when skin becomes red remove the application.

Onion: Slice onions, mix them with flour and water, then dry. Put on cloth and cover with another cloth and put on chest. When skin becomes irritated, remove.

Bread and milk: Soak bread in milk and put in cloth. Then apply to sore. Used for felons.

Question: Name three kinds of bandages and tell how to apply each.

Answer: *Head*: Take square piece of cloth, spread on head, and hold in place by roller bandage around and around the head. Fasten bandage with safety pin.

Eye: Square of gauze over affected eye. See that other eye is not covered. Use roller bandage to hold patch in place. Apply same as you would for head bandage, varying bandage over eye dressing.

Sling: Take square piece of cloth and fold diagonally. Put under arm so that it has a place to rest the wrist.

Then put around neck, tying in a double knot — not over spine. Wrist must be higher than the elbow or patient will complain of pain.

Question : A little boy has a bloody nose. How would you stop it?

Answer : Use paper towels and water. Put wet pad on back of neck and bridge of nose. If it does not stop, lay patient down with his head raised a trifle and continue cold compresses.

Question : If you were on a lonely road and met a child with the lower part of his arm broken, what would you do?

Answer : One must use what he has. I would take my tie for bandage and two pieces of a branch of a tree as temporary splints and, if I had another piece of cloth, I would make a sling of it. Then I would pin it to the child's clothing.

Question : If someone was caught in a trap in the woods and the nearest farmhouse was one-half mile away, how would you get him there?

Answer : Try to open trap and apply handkerchief to wound, if necessary. If he is unable to walk with that foot, take a stick and use it as a crutch and take him to a road. Perhaps a person in a car will happen along and will give assistance.

Question : If you were going through a canyon and the person with you slipped and fell down into the water, what would you do?

Answer : Try to get down the side of the canyon, get into the water and, if the person is conscious, have him put his hands on rescuer's shoulders and swim to shore. Then climb up the canyon by means of the bushes and pieces of stone sticking out.

CHAPTER XV

MECHANICS' CLUBS

OUTLINE FOR ELECTRIC CLUB

I. History of electricity

What is electricity? — Werwotl, O.: *Trowbridge School of Practical Electricity*, Vols. I and VI

II. Fundamentals of electricity

Magnetism, static, simple cells, principle of dynamo, generator, motor, condenser, transformer, telephone, telegraph

References

Adams, J. H.: *Harper's Electricity Book for Boys*

Doubleday, Russell: *Stories of Inventors*

Gibson, C. R.: *Electricity of To-day*

Gibson, C. R.: *Our Good Slave, Electricity*

Jackson, D. C., Jackson, J. P., and Black, N. H.: *Elementary Electricity and Magnetism*

Kirkman, M. M.: *Electricity Applied to Railroads*

Sloane, T. O.: *Electric Toy Making for Amateurs*

III. Uses of electricity

A. In the home

B. In transportation

C. In communication

D. In industries and agriculture

E. In medicine and science

- IV. Sources of electricity
 - A. Natural
 - B. Artificial
- V. Latest developments
- VI. Possible new uses
- VII. Electrical apparatus and toys that can be made at home or in school

References

- Adams, J. H.: *Harper's Electricity Book for Boys*
- Sloane, T. O.: *Electric Toy Making for Amateurs*
- Current magazines

OUTLINE FOR MECHANICS' CLUB

- I. History of machinery
 - How it has taken place of handwork in
 - A. The home
 - B. Transportation
 - C. Industries
 - D. War
 - E. Communication
 - F. Agriculture
 - G. Recreation

References

- Chase, A., and Clow, E.: *Stories of Industries*, Books I and II
- Cochrane, C. H.: *Wonders of Modern Mechanism*
- Crump, Irving: *Boys' Book of Railroads*

- II. Study of metals best fitted for various parts of machinery, as to strength, durability, hardness, fusibility, malleability, expense, beauty

References

- Bassett, Sara Ware: *The Story of Glass*
- Samuel, E. I.: *The Story of Iron*

Smythe, J. A. : *Lead*

Notes for a history of lead

III. Relations between sources of raw materials and places of industrial activity

IV. What can we do in our shop?

A. Machine repair

B. Experimenting with gears, levers, etc.

C. Mechanical toys

1. Tin can toys

2. Lead casting

V. Toy repairs

References

Bassett, Sara Ware : *The Story of Glass*

Cochrane, C. H. : *Wonders of Modern Mechanism*

Darrow, Floyd L. : *The Boys' Own Book of Great Inventions*

Doubleday, Russell : *Stories of Inventors*

Henley, Hobart : *Soldering and Bronzing*

Hopkins, G. M. : *Home Mechanics for Amateurs*

Kelley, J. G. : *The Boy Mineral Collectors*

Rolt-Wheeler, Francis : *The Boy with the U. S. Inventors*

Smythe, J. A. : *Lead*

OUTLINE FOR WOODWORKING CLUB

I. How mankind always did and always will depend on wood

References : Histories

II. Sources of raw materials

Reference

Greeley, W. B. : *Wood for the Nation*

III. Study of woodworking industries of Appleton

A. Furniture

- B. Toys
- C. Paper
- D. Lumber
- E. Millwork

IV. Woodworking process and finishes

- V. Things we can make with wood in the shop — toys, models, furniture

References

- Adams, J. H.: *Harper's Indoor Book for Boys*
 Beard, Patten: *The Jolly Book of Boxcraft*
 Brown, N. C.: *Forest Products, Their Manufacture and Use*
 Bryant, R. C., *Lumber*
 Cross, C. F., and others: *Wood Pulp and Its Uses*
 Griffith, I. S.: *Woodwork for Beginners*
 Raeth, G. A.: *Home Furniture Making*
 Rolt-Wheeler, Francis: *The Boy with the U. S. Inventors*
 Sanford, F. G.: *Art Craft for Beginners*

ORGANIZATION AND WORK OF MECHANICS' CLUB

Wheaton — was elected president.

Order of procedure: Ten minutes each week for reports on special subjects. Thirty-five minutes for work on toys and projects. Every second week, fifteen minutes given for lecture by the leader. Club divided into three groups, namely, Electric Club, Mechanics' Club, and Woodworking Club. Each group had a coach selected by the leader. Coach reported at close of each meeting as to work, books, and names of members to give special ten-minute report next meeting. The whole club participated in electricity demonstrations at high school by Mr. —.

Weekly Report of Mechanics' Club

Leader _____

Date Jan. 22

1. Plan for next week

Two boys who had electrical work last year, are to coach the new members in experiments in static electricity. Woodworking department is to submit working plans for correction and discussion. Mechanics are to bring their own equipment.

2. To-day's aim

Organize club. Elect a president and four assistants. Reading list to be given to the members. Pamphlets to be given to the electric department and a list of material for members to bring.

3. Method

Officers to be elected according to parliamentary rules. Lay plans and methods for best way of working our four groups.

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

(d) Report of what was done

The meeting was grouped into four sections, *i.e.*, electricity, woodwork, tin toys, and mechanics. President of club was elected. Work laid out for next meeting. *Electricity*: Read Part I, in government pamphlet, and bring apparatus called for in experiments 1, 2, and 3. *Woodwork*: Plans for work to be laid out by each member for next meeting.

Mechanics: Each member to bring some machine to

be repaired and to have a report on some late invention.

Tin toys: No one signed up for this section.

Weekly Report of Mechanics' Club
Leader _____

Date Jan. 29

1. Plan for next week

Electricity: Work experiments in magnetism and static electricity.

Woodwork: Lecture on wood products of Hosleton.

Mechanics: Assignment of topic for each member. Work on machine repair.

2. To-day's aim

Teach relationship between magnetism and electricity. Static and magnetism. Boys to work on separate problems in woodwork and mechanics.

3. Method

Electric section went to high school laboratory, where Mr. ——— demonstrated. Woodwork and mechanics divisions worked in shop.

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

(d) Report of what was done

Magnets and their magnetic fields were demonstrated at the high-school physics laboratory. Magnets, compasses, iron filings, paper, and blue prints were used. It was demonstrated that the earth is a magnet. Two kinds of static electricity, positive and negative, were demonstrated by the use of hard rubber stick, glass rod, silk, and pith balls. The static machine was demonstrated.

Weekly Report of Mechanics' Club

Leader _____

Date Feb. 5

1. Plan for next week

Electricity: Submit drawing for buzzer.*Mechanics*: Devote forty-five minutes in reading to stimulate interest.*Woodwork*: Arouse interest in models of work.

2. Method

Electricity: Boys divided into three groups, each group having a coach (one of the boys had this work last year). Experiments with magnets.*Mechanics*: Read and discuss books. Plan projects to work out.*Woodwork*: Work laid out for models.

3. Report of work accomplished

(a) Good questions asked

(b) Good contributions

The suggestion was made that we have ten minutes for a report on something that would interest the whole group.

Weekly Report of Mechanics' Club

Leader _____

Date Feb. 12

1. Plan for next week

Electricity: Study of web cell battery and work on buzzer coils*Woodwork*: Work on projects*Mechanics*: Molding lead wheels for toy locomotive and train

2. To-day's aim

Electricity: Explanation of principle of buzzer and work on models of buzzer

Woodwork: Work on models

Mechanics: Planning a miniature railroad

3. Method

Electricity: Drawings made of buzzers; magnetic field around current-bearing wire studied

Woodwork: Bench work

Mechanics: Molds made for casting car wheels

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Suggestion of molding car wheels of solid lead rather than making them of tin

(c) Books read and amount of reading done

Books not checked

(d) Report of what was done

Weekly Report of Mechanics' Club

Leader _____

Date Feb. 19

1. Plan for next week

Electricity: Study of principles of transformer; work on coils

Woodwork: Project work

Mechanics: Laying plans for miniature railroad

2. To-day's aim

Electricity: To teach the principle of alternating current and its use in transformers so that we may know the principle of motors

3. Method

Lecture at board; drawings made to explain magnetic fields around current-bearing wires

Woodwork: Bench work

Mechanics: Bench work

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Suggestions made that boys bring jars for batteries and their toy electrical machinery from home

(c) Books read and amount of reading done

Steve and the Steam Engine — Kenneth

The Boys' Own Book of Great Inventions — Bigelow

Ted and the Telephone — Clifford

(d) Report of what was done

Several dry cells were used to demonstrate magnetic field around current-bearing wire. Compass used as indicator. A few wires made around coil magnetized it. Transformers used and demonstrated for alternating current.

LIBRARY

The following books were in the Mechanics' Club library:

Adams, J. H.: *Harper's Machinery Book for Boys*, Harper and Brothers

Bassett, G. W.: *Ted and the Telephone*, Little, Brown and Company

Bassett, Sara Ware: *Steve and the Steam Engine*, Little, Brown and Company

Beard, D. C.: *Automotive Trade Training*, Charles Scribner's Sons

Beard, D. C.: *The Jack of All Trades*, Charles Scribner's Sons

Beard, D. C.: *Shelters, Shacks, and Shanties*, Charles Scribner's Sons

Davis, W. S.: *Practical Amateur Photography*, Little, Brown and Company

Forman, S. C.: *Stories of Useful Inventions*, The Century Company

Meadowcroft, W. H.: *Boy's Life of Edison*, Harper and Brothers

Morgan, A. P.: *Boys' Home Book of Science and Construction*, Lothrop, Lee and Shepard Company

Parkman, Mary R.: *Conquests of Invention*, The Century Company

Shafer, D. C.: *Harper's Beginning Electricity*, Harper and Brothers

Thatcher, Edward: *Making Tin Can Toys*, J. B. Lippincott Company

Wade, Mary H.: *The Light Bringers*, Little, Brown and Company
The Model T Ford Car, Sales Equipment Company, Detroit, Michigan

Other References

Adams, J. H.: *Harper's Electricity Books for Boys*, Harper and Brothers

Adams, J. H.: *Harper's Indoor Book for Boys*, Harper and Brothers

Adams, J. H.: *Harper's Machinery Book for Boys*, Harper and Brothers

Bassett, Sara Ware: *The Story of Glass*, Penn Publishing Company

Bassett, Sara Ware: *Ted and the Telephone*, Little, Brown and Company

Beard, Patten: *The Jolly Book of Boxcraft*, Frederick A. Stokes Company

Brown, N. C.: *Forest Products, Their Manufacture and Use*, John Wiley and Sons

Bryant, R. C.: *Lumber*, John Wiley and Sons

Chase, A., and Clow, E.: *Stories of Industries*, Books I and II, Educational Publishing Company

Cochrane, C. H.: *Wonders of Modern Mechanism*, J. B. Lippincott Company

Cross, C. F., and others: *Wood Pulp and Its Uses*, The Van Nostrand Company

Crump, Irving: *Boys' Book of Railroads*, Dodd, Mead and Company

- Darrow, Floyd L.: *The Boys' Own Book of Great Inventions*, The Macmillan Company
- Doubleday, Russell: *Stories of Inventors*, Grosset and Dunlap
- Gibson, C. R.: *Electricity of To-day*, J. B. Lippincott Company
- Gibson, C. R.: *Our Good Slave, Electricity*, J. B. Lippincott Company
- Griffith, I. S.: *Woodwork for Beginners*, Manual Arts Press
- Henley, Hobart: *Soldering and Bronzing*
- Jackson D. C., Jackson, J. P., and Black, N. H.: *Elementary Electricity and Magnetism*, The Macmillan Company
- Kelley, J. G.: *Boy Mineral Collectors*, J. B. Lippincott Company
- Kirkman, M. M.: *Electricity Applied to Railroads*, Crappley, Phillips Company
- Raeth, G. A.: *Home Furniture Making*, Frederick A. Stokes Company
- Rolt-Wheeler, Francis: *The Boy with the U. S. Inventors*, Lothrop, Lee and Shepard Company
- Samuel, E. I.: *The Story of Iron*, Penn Publishing Company
- Sanford, F. G.: *Art Craft for Beginners*, The Century Company
- Sloane, T. O.: *Electric Toy Making for Amateurs*, Norman W. Henley Publishing Company
- Smythe, J. A.: *Lead*, Sir Isaac Pitman and Sons
- Werwotl, O.: *Trowbridge School of Practical Electricity*, Vols. I and VI

CHAPTER XVI

SALESMANSHIP CLUB

SALESMANSHIP OUTLINE

I. How can a business be built up through service?

References

Brisco, N. A.: *Retail Salesmanship*, pp. 118-127

Marden, O. S., and MacGrail, J. F.: *Selling Things*,
pp. 95-195

Norton, H. R.: *A Textbook on Retail Selling*, pp.
172-186

II. How does health affect salespeople?

References

Brisco, N. A.: *Retail Salesmanship*, pp. 29-44

Marden, O. S., and MacGrail, J. F.: *Selling Things*,
pp. 226-250

III. How does the appearance of salespeople affect the customers?

References

Brisco, N. A.: *Retail Salesmanship*, pp. 45-70

Marden, O. S., and MacGrail, J. F.: *Selling Things*,
pp. 19-28

Norton, H. R.: *A Textbook on Retail Selling*, pp. 38-52

IV. How should merchandise be cared for, arranged, and displayed?

Reference

Norton, H. R.: *A Textbook on Retail Selling*, pp. 61-86

V. How should a sale be conducted?

References

Brisco, N. A. : *Retail Salesmanship*, pp. 165-187Marden, O. S., and MacGrail, J. F. : *Selling Things*,
pp. 19-28, 37-47, 71-79, 105-112Norton, H. R. : *A Textbook on Retail Selling*, pp. 86-143

VI. What is the value of advertising?

References

Brisco, N. A. : *Retail Salesmanship*, pp. 141, 165, 212,
218-246Norton, H. R. : *A Textbook on Retail Selling*, pp. 218-
246Nystrom, P. H. : *Retail Selling*, pp. 241-252

VII. What are some of the types of customers and how should each type be treated?

References

Brisco, N. A. : *Retail Salesmanship*, pp. 151-163Norton, H. R. : *A Textbook on Retail Selling*, pp. 187-
203Nystrom, P. H. : *Economics of Retailing*, p. 85

WEEKLY REPORTS

Weekly Report of Salesmanship Club

Leaders _____

Date Jan. 22

1. Plan for next week

Talk on salesmanship by Mr. — from — Company

2. To-day's aim

Organization of the Salesmanship Club; discussion of
work to be done during the year

3. Method

Elect officers; discuss plans for the year

4. Report of work accomplished

- (a) Good questions asked
- (b) Good contributions
 - (1) Suggestion to make salesmanship booklet
 - (2) Description of stores, given by a girl who lived in Germany
 - (3) Experiences in salesmanship related
- (c) Books read and amount of reading done
- (d) Report of what was done

At the first meeting of the Salesmanship Club officers for the year were elected. After this was done each member was given a questionnaire made up of three questions, as follows:

- (1) What are some of the things you would like to learn about salesmanship?
 - (2) What are some of the things you would like to do in the Salesmanship Club?
 - (3) What experience have you had in selling articles?
- Some thought they would like to learn to be clerks; others wanted to learn how to conduct a business.

Suggestions about what they would like to do were: visit a store to get more ideas; get a clearer idea of what a clerk should know; get actual experience in salesmanship; learn to wrap neat packages.

Their experiences in salesmanship varied. One had been a clerk in an aunt's ten-cent store in a small town; one had helped in a grocery store for three weeks; and still another had been a clerk in a store in Germany. During the class one member suggested making a booklet of articles found in magazines on salesmanship.

The rest of the period was spent in telling of experiences in selling articles. Two of the most important essentials of selling were brought out by one of the members, who had been trying to sell bluing in a house-to-house canvass. Practically all customers had no use for the bluing, for someone had just canvassed the territory. The need for the article was not felt in that neighborhood; therefore it could not be sold. This same member had already learned from experience that a pleasing personality was necessary, for he said, "You have to be polite or they won't buy."

Weekly Report of Salesmanship Club
Leaders _____

Date Jan. 29

1. Plan for next week

Discuss service

(1) How can a business be built up through service?

(2) What different methods can be used to give good service?

2. To-day's aim

To give members a general idea of salesmanship

3. Method

Lecture on salesmanship by a salesman. Good thought questions asked

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read and amount of reading done

Nystrom, P. H.: *Retail Selling*

(d) Report of what was done

Mr. —, a salesman from a department store, spoke to the club. He told of the value of a trained salesman to a department store. When these trained salesmen are given positions, they seem to know immediately what their duties are. Some of the duties are: keeping stock, counting change, making out sales checks, and wrapping parcels. Knowing these things upon entering the store is of great value to the company. Every clerk is given the preference of the department in which he wishes to work, for the person who is vitally interested in some phase of work does better in it than in any other. He also spoke about the deportment of clerks, bringing out the fact that a clerk must be punctual, that he must be attentive to his own department, and that he never should be found chewing gum or lunching during working hours. He stated that two of the biggest problems of a department store were group gossiping and inability to write figures distinctly. A little introduction was given to the question to be discussed at the next meeting. Service is necessary to all professions. The doctor, teacher, nurse, and lawyer all sell their services.

Weekly Report of Salesmanship Club
 Leaders _____

Date Feb. 12

1. Plan for next week

Continue discussion on service; demonstration and lecture by a traveling salesman

2. To-day's aim

To bring out more good points on how to give the best

service, including deliveries, telephone orders, and exchanges

3. Method

General discussion led by Mr. —

4. Report of work accomplished

(a) Good questions asked

(1) What should be done if there is just one clerk and three customers in a department?

(2) How should exchanges be treated?

(b) Good contributions

One member suggested that a clerk from some other department be called in case there were more customers than clerks in a department.

(c) Books read and amount of reading done

Occupations, 103 pages

Men Who Sell Things, 70 pages

Salesmanship, 150 pages

(d) Report of what was done

Each member of the class was given a valentine, on the back of which a part of Pettibone's ¹ Creed was written. This was:

(1) To do the right thing, at the right time, in the right way.

(2) To do some things better than they were ever done before; to eliminate errors.

(3) To know both sides of the question; to be courteous.

(4) To be an example; to work for the love of work.

(5) To anticipate requirements; to develop resources.

(6) To recognize no impediments.

(7) To master circumstances.

¹ A local store.

- (8) To act from reason rather than from rule.
- (9) To be satisfied with nothing short of perfection.

Service is a magnet. It attracts customers more than either quality or price. If the service is inefficient, customers will be attracted to other stores in spite of price and quality. "Once a customer, not always a customer." The making of friends is very necessary. A customer when approaching a department should always be recognized. A customer should be respected in the store just as if he were making a personal call in a home. In order to give the best service in deliveries, correct initials, names, and addresses should be obtained by the clerk. Accuracy along this line will save much delay. How should an exchange be treated? A person returning goods should be treated as though he were purchasing instead of exchanging an article. There should be no arguing between customer and clerk. In case any argument should arise, the floor manager should be called. The customer should always be given the benefit of the doubt.

A customer should be made comfortable by being given the privilege of using reading rooms, rest rooms, check rooms, public telephones, post office service, and mail orders.

Weekly Report of Salesmanship Club
Leaders _____

Date Feb. 19

1. Plan for next week

Discussion of how health affects salespeople

2. To-day's aim

To bring out more good points on service and to enumerate all of them

3. Method

Questions on all the different phases already covered

4. Report of work accomplished

(a) Good questions asked

Should a customer's package and change be given to him at the same time? Why?

(b) Good contributions

A clerk should never misrepresent goods, because it will reflect on the store's method of doing business.

(c) Report of what was done

These questions were discussed :

(1) What is the chief purpose of a retail store?

(2) What in the main distinguishes one store from another?

(3) State two divisions of service.

(4) What are the requisites for creating a favorable first impression?

(5) Why should care be exercised in the opening remarks to a customer?

(6) Why should the benefits of a sale be mutual?

(7) Why should salespersons present only the true qualities of goods?

(8) Why does service often require a knowledge of sizes?

(9) Mention several forms of service features in stores.

(10) Why should package and change be received at the same time?

(11) Why do some delivery boys cause dissatisfaction?

Weekly Report of Salesmanship Club
Leaders _____

Date March 19

1. Plan for next week
Visit to a store to get some experience in making sales, writing out sales checks, counting out change, and wrapping packages
2. To-day's aim
Dramatization of a sale of mops and polish
3. Method
Dramatization
4. Report of work accomplished
 - (a) Good questions asked
What are the necessary steps of a sale?
 - (b) Good contributions
Clerks are not allowed to give special prices to customers.
 - (c) Books read and amount of reading done
Romance of a Great Store, 263 pages
 - (d) Report of what was done
The four necessary steps to a sale were discussed.
These were :
 - (1) Attracting attention by display
 - (2) Arousing interest
 - (3) Creating desire
 - (4) Closing the saleMr. — brought over oil mops and oil to class, to be sold to different members of the class. First the mops were studied and their special good points brought out. Then each member was given a chance to sell a mop and oil to someone else in the class. Different types of sales checks were made out.

Weekly Report of Salesmanship Club
Leaders _____

Date Apr. 30

1. Plan for next week

Trip to a knitting factory

2. To-day's aim

Discussion of different types of customers and the salesman's approval of them

3. Method

Discussion and questions

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

There are so many different types of customers the salesman's approach must be different each time.

(c) Books read and amount of reading done

Worked on salesmanship books

(d) Report of what was done

The subject of different types of customers was discussed. Some of these are: a silent customer, a customer who is "just looking," a talkative customer, a stranger in the city, a man customer, a woman with a child, an elderly customer, a foreigner, a customer who is in a great hurry, an early customer, a late customer, bargain hunters, and a telephone customer. All of these require more than the ordinary thoughtful treatment. Many of them are so often misunderstood that the salesman should try to help each one as much as possible. The more he gives intelligent help, the better he serves.

SALESMANSHIP BIBLIOGRAPHY

Books

- Brisco, N. A.: *Retail Salesmanship*, Ronald Press Company
 Faris, J. T.: *Winning Their Way*, Frederick A. Stokes Company
 Farrington, Frank: *Clerk's Book*, Byxbee Publishing Company
 Fisk, J. W.: *Retail Selling*, Harper and Brothers
 Fowler, N. C.: *Practical Salesmanship*, Little, Brown and Company
 Fowler, N. C.: *Starting in Life*, Little, Brown and Company
 Gowin, E. B., Wheatley, W. A., and Brewer, J. M.: *Occupations*, Ginn and Company
 Hayward, W. S., and White, P.: *Chain Stores*, McGraw-Hill Book Company
 Marden, O. S., and MacGrail, J. F.: *Selling Things*, Thomas Y. Crowell Company
 Norton, H. R.: *A Textbook on Retail Selling*, Ginn and Company
 Nystrom, P. H.: *Economics of Retailing*, Ronald Press Company
 Read, H. E.: *Salesmanship*, Lyons and Carnahan
 Rollins, F. W.: *What Can a Young Man Do*, Little, Brown and Company
 Strong, E. K.: *Psychology of Selling and Advertising*, McGraw-Hill Book Company
 Tosdal H. R.: *Principles of Personal Selling*, A. W. Shaw Company

*Magazines**How to Sell**Dry Goods Economist**American Magazine*

BRIEF OF SALESMANSHIP MANUAL

The following pages are a brief of a store manual that was used in the club.

Salesmanship Outline

I. Personality

A. Mind and character

1. Intelligent, mentally alert
2. Well informed, ready to converse
3. Cheerful and courteous
4. Self-confident

B. Appearance

1. Dress
2. Absence of annoying habits
3. Expression
4. Voice
5. Health

II. Sales

A. Know your goods

1. What are its uses?
2. Of what is the article made?
3. How is it made?
4. What style or design is it?
5. Who made it?
6. What different kinds of the same article have we?
7. What interesting history or background is connected with this article?
8. How much does it cost and why is it priced that amount?

B. Believe in and be enthusiastic about your stock

C. Be trustworthy

1. Honest selling
2. Selling goods for service

Salesmanship

I. Personality

A customer automatically associates the personality of the salesperson with the policy of the store. That is why it is

vitaly necessary for one to act as the personal representative of the management. If it were possible for the members of the firm to shake hands and greet every customer who enters the store, they would do so. Since this is physically impossible, the salespeople take their place; one's manner and courtesy must give evidence of the same personal pleasure that the management would show in being privileged to serve.

The field of salesmanship requires even more skill than stenography, designing, or nursing, because retail salesmanship involves dealing with complex human nature and requires shrewd insight into the thoughts and feelings of the customer and one's fellow workers. A salesperson, to succeed, must know both people and things.

If a person wants to be a business success, he must be intelligent and well informed about current events. He can do this only by keeping up with the news. He should read the local paper every day for local news. He should also keep informed on things of national interest. He should try to find time to read one or two authoritative periodicals for special information. He must acquire enough command of language so that he can talk readily, adequately, and correctly. A quiet, interesting, convincing talker has mastered half the battle of salesmanship.

A good salesperson is one whose bearing indicates a certain mental calmness. A quiet balance is needed to go through a trying day without losing control of one's nerves and without forgetting to retain one's poise and equilibrium. The hurried, impatient demands of customers should not produce worry. Work politely, calmly, and with a quick efficiency that results in work well done; retain poise, no matter how busy; keep yourself well in hand, because a department store is likely to irritate the nerves of even the most steadily balanced person.

A happy, cheerful disposition is one of the essentials of a

good salesman. One must cultivate the ability to shake himself free of disturbing annoyances, no matter how many arise. Personal troubles should not be brought to the store, because no customer likes to meet a gloomy, downcast, grumpy salesperson. The grouchiest person will react pleasantly to a good-natured, happy approach. A cheerful attitude helps sales work.

If one is to command the respect and confidence of customers, one's bearing must be that of self-confidence. A good salesman will approach his customers and his work with shoulders thrown back and head erect. He will act and talk in a convincing manner so as to inspire respect and confidence. He will answer questions immediately, with a self-assured air. He will not hesitate or grope for words. If he does not know the answer to a question, he will say so but will offer to get the desired information.

The most thorough interpreter of one's personality is the voice. It should be given every care and consideration. Listen to it as you talk and try to hear it with the ears of another. One's voice should at all times be pleasantly modulated. Speak clearly and distinctly, so that the customer can hear without effort; do not speak so loudly that the voice grates. If possible, try to keep it at the same level as the customer's. Speak slowly enough so that remarks can be easily understood. Avoid mumbling or speaking in a monotonous tone. If one's voice is polite, agreeable, and moderately low, it cannot help but affect the customer pleasantly.

One's expression is an indication of his attitude and personality. Keep it keen and alive, so that it shows an interest in the work and the customer; make it seem friendly and express a desire to serve. No matter how tired, one should smile pleasantly at the approach of a customer. Do not smirk or give a bored smile of duty, but smile in a sincere, engaging

way that will make a customer feel welcome in the store. Unfortunately, however, salespeoples' smiles can be overdone.

No factor can help or hinder success more than personal appearance, as far as dress is concerned. Too many salespeople believe that, to be well dressed, one must be expensively dressed. A good store does not look with favor upon a salesperson spending too much of his or her income on garments to wear. Gaudy or brilliant dress or adornment has no place in a retail store; so do not wear it during the hours that are open for business. One's appearance must be as unobtrusive as possible, and any detail of headdress or adornment that makes one stand out conspicuously is in poor taste and out of place.

No matter what sort of work one attempts in life, a healthy body is the foundation of all things. It is the physical basis for success in everything — business, professions, and social life. If one keeps his body in good health, he insures for himself personal charm and magnetism and greater efficiency in work. Health and appearance are two assets of success. Give them the attention they deserve.

II. Sales

One must know his merchandise before he can sell it. When one knows his goods and can describe them convincingly, he has taken a long step toward convincing salesmanship. By knowing the merchandise, one deserves the name of "seller"; otherwise one is merely an "order taker." Any person can make out a sales check or, at the customer's request, take an article off a shelf; but it takes brains, ability, intelligence, and information to create a desire to own goods. This is what is meant by good salesmanship.

What is meant by merchandise knowledge is illustrated in the following sales talk that one might use in selling underwear. If a customer asked for information about a certain union suit, an uninformed salesman might say: "It's the best quality we

have. It's built strongly and will stand lots of wear." On the other hand, if the salesman knows the goods, he might explain at intervals during the sale: "The edges of the wings are turned back and hemmed, making the edges lie perfectly flat and making it impossible for them to curl up and form an uncomfortable wad or roll. The side gores and gussets are placed in the legs at the crotch. The semi-raglan shoulder is elastic and permits freedom of motion without loss of shape. The double lockstitch seams can't be pulled apart. The buttons can't come off. They're sewed with heavy silk thread with double knotted ends. The buttonholes, too, are corded, stitched closely, and won't fray or rip." This is an illustration of the difference between the imparting of actual merchandise knowledge and uttering weak, inconsequential sales talk. One cannot talk convincingly unless he knows.

Tact in delivering merchandise information to customers is needed. Many persons, particularly "know-it-all" customers, object to being told anything. The way merchandise information is conveyed is important. It must be told interestingly, not delivered as a lecture nor rattled off as a string of technical facts.

Again, it is necessary to know how and when to talk informatively of the merchandise. It is futile to bore a customer with a list of historical facts if they are not necessary. Customers are concerned only with their needs, and they want to know merchandise facts only in so far as they relate to these needs. There is no use in telling a customer why full-fashioned hose are better than seamless ones unless this information is given to convince her why and to show how she will save money or get better service by buying the full-fashioned hosiery. To flaunt a lot of historical or technical facts before a customer when the occasion does not demand it is not only boresome but may mean a lost sale.

Customers are usually interested in historical backgrounds in connection with merchandise. A curious fact, interestingly related, usually gets attention. Take rugs: "Have you an oriental rug with green as the prevailing color?" a customer inquires, after the salesman has been showing her various rugs. "No, madam; I'll tell you why. You see, to the Mohammedan, green stands for immortality, and it is regarded as a sacred color. For this particular reason green has not been used by the orthodox Mohammedan in weaving, until within the last decade."

A salesperson has many sources of becoming familiar with goods. One of the best methods of getting merchandise information is to study merchandise itself. Again, if one will only take the trouble, many merchandising facts can be learned from the customers. They are constantly using the goods and the results of their experiences will prove helpful.

Half-hearted salesmanship is more contagious than enthusiasm; but if merchandise is brought out with an air of pride and pleasure, the customer's immediate attention is likely to be secured. Indifference courts defeat. The salesperson should enjoy selling; he should show merchandise with an air of personally admiring every article in stock. If a lace collar and cuff set is shown, for example, handle it delicately with an air of pride and appreciation, and explain, "This is a beautiful set; it's real filet." Approach customers as if you enjoyed serving them; show your stock as if you were proud to do so, as if you yourself admired every article. Make your customer feel that you are enthusiastic about assisting her.

The salesperson's duty also includes being honest and conscientious. Honesty is a quality that needs no explanation. It is a part of every good moral equipment; it means neither trying to take advantage of your store nor of the customers.

Both must be honestly and fairly treated. Business to-day is run on honest principles.

Why is a satisfied customer the best advertisement? Use imagination and good judgment in helping a customer make a selection. For example, if a stout, buxom woman asks to see a georgette blouse, have enough imagination to avoid showing her fancy, frilly blouses. Bring out only the plainer styles, continuing in this showing until your customer indicates some preference. In almost any line of business good judgment is needed, and this is especially true of selling, where one deals largely with personal peculiarities. It takes judgment, for example, to know what price or type article to show a customer when she makes no specifications. If a shabbily dressed woman requests "a coat for this little girl," indicating her child, you must use judgment and bring out only practical, medium-priced coats; you will show none light in shade, impractical, or expensive. Try to send your customer away satisfied, for she will surely come back if she is.

Advertising

I. Questions in advertising

- A. What is meant by "seconds" in merchandise?
- B. Why are capital letters used so much more extensively in advertisements than in other kinds of printed material?
- C. Give two reasons why street cars are an especially good advertising medium.
- D. Explain why dark and light cards are usually alternated in street car frames.
- E. Why are pictures and rhymes often used?
- F. What is your opinion of billboard advertising?
- G. What legislation, if any, has been attempted in your state against billboard advertising?

- H. What do you gain from reading editorials?
- I. Describe any Chinese rug you have ever seen.
- J. What is meant by symbolic design?
- K. Explain the meaning of "bizarre," "motif," "grotesque."
- L. Show that the telephone company's instructive advertising is profitable from a business standpoint.
- M. Name any stores whose bundles are easily identified by the wrapping paper.
- N. Describe any store delivery wagons or automobiles that are easily distinguished.
- O. Of what personal advantage is it to you to observe the windows of your store's competitors?
- P. Name four daily papers of national reputation.
- Q. Show that the modern term "publicity" is an apt synonym for "advertising."
- R. What do you think of the use of the abbreviation *ad* for the full word *advertisement*?
- S. Why is a satisfied customer the best advertisement?

Give an actual experience, if possible, in illustration.

II. History of advertising

- A. 500 years B.C.
 - 1. Town criers — Palestine, Greece, and Rome
- B. 500 years after Christ
 - 1. Changes — slow
 - 2. Progress toward universal trade hampered by
 - (a) Lack of transportation
 - (b) Lack of communication
 - (c) No universal educative system
 - 3. English criers, merchants, banks, stores
- C. Advertising down to 1812
 - 1. Invention of printing press

- (a) Coster — 1420
- (b) Gutenberg — 1439
- 2. "Necessity, the mother of invention"
- 3. Gradual development — more liberal ideas
 - (a) Political
 - (b) Social
 - (c) Economic

III. Methods of advertising

- A. 1850 merchant usually inserted a few lines telling of new goods (took same space as modern "Help Wanted" items)
- B. Typical examples of early advertising
 - 1. "Colored Cambrics, 125 cases, light and dark assortments, from $4\frac{1}{2}$ to 6 cents, for sale by C. B. LeBaron, 55 Pine Street"
 - 2. Rhymed advertising popular
 - "To order, shirts we make without delay;
Right measure take and every wish obey.
Our pledge we give, and warrant them to fit,
Nor rest content if not the fancy's hit."
- C. Ethics of advertising
 - 1. Old methods of advertising
 - (a) Generally characterized by exaggeration and deceit
 - (b) Old policy still believed by a few
 - 2. The policy of to-day
 - (a) No exaggeration, no misleading statements, and no half truth shall be made under any circumstances in connection with any publicity. Any statement of which there is not absolute proof at the time it is to be printed will be excluded from our publicity.
 - (b) Aim to sell and not to push goods. A reason

must always be given for a special price or extra quality. If the article is a "second," it must be so represented.

D. Good style in advertising

1. Honesty and frankness as firm foundations for good advertising
2. Essentials of good advertising
 - (a) Diversity in style
 - (b) Convincing qualities
 - (c) Attracting power
 - (d) Artistic value
3. Qualities to hold attention and stimulate interest
 - (a) Good design
 - (b) Provision for adequate space
 - (c) Regard for laws of balance
 - (d) Wise distribution of emphasis

E. Educational values of advertisements

1. Detailed descriptions of merchandise repay careful study.
2. Analyzing the advertisement
 - (a) Make a list of specific points of information found in it.
 - (b) Underline words or terms that are new to you and look up their meaning.
 - (c) Make a list of especially well chosen adjectives.
3. Teaching through advertising

F. Editorial advertisements

1. Much used to-day
2. As dignified presentation of a central idea

G. Explanation of special prices

1. Being eliminated now — because of opposition to interest of consumer
2. Good business — explain "exceptional" values

H. Humorous advertising

1. Exaggerated and grotesque figures are always remembered.
2. Aim of some firms to use humorous advertising as trade mark

I. Other advertising mediums

1. Theater programs
2. Leaflets and circulars enclosed in bundle
3. Cards in street cars
4. Signs in elevators and throughout the store and open country
5. Electric signs
6. Billboards set conspicuously in the open country

J. Window displays

1. Value in advertising
2. Value of space, \$300 to \$500 a day in large stores

K. Coöperation of salespeople

1. Salespeople should feel a sense of pride and personal responsibility.
2. All windows should be carefully studied.
3. All advertisements should be carefully read.

L. Classification of modern advertising

1. Newspapers, magazines, and journals
2. Literature, catalogues, booklets, calendars, circulars, books, and handbills
3. Street car advertising and street billboards
4. Movies, stereopticons, signs, street cars, and salesmen
5. Personal advertising

CHAPTER XVII

TEACHERS' CLUB

A SUGGESTIVE OUTLINE

I. Technique and methods of teaching

A. References

1. Johnson, George E.: *Education by Plays and Games*, Ginn and Company
2. Lee, Joseph: *Play in Education*, The Macmillan Company
3. McMurry, F. M.: *How to Study and Teaching How to Study*, Houghton Mifflin Company
4. O'Shea, M. V.: *Everyday Problems in Teaching*, Bobbs-Merrill Company
5. Parker, Samuel Chester: *General Methods of Teaching in Elementary Schools*, Ginn and Company

II. The influence of the teacher over her students; the results

A. References

1. Eggleston, Edward: *The Hoosier School Boy*, Charles Scribner's Sons
2. Eggleston, Edward: *The Hoosier Schoolmaster*, The Macmillan Company
3. Hughes, Thomas: *Tom Brown's School Days*, The Macmillan Company
4. Patri, Angelo: *A Schoolmaster of the Great City*, The Macmillan Company

5. Quick, Herbert: *The Brown Mouse*, Bobbs-Merrill Company
6. Stephens, D. V.: *Phelps and His Teachers*, Hammond and Stephens Company, Fremont, Neb.
7. Wray, Angeline: *Jean Mitchell's School*, Public School Publishing Company
8. Zollinger, Gulielma: *Maggie McLanehan*, McClurg and Company

III. Lives of worth-while people; their influence on education

A. References

1. Beard, Annie: *Our Foreign-Born Citizens*, Thomas Y. Crowell Company
2. Bok, Edward: *A Dutch Boy Fifty Years After*, Charles Scribner's Sons
3. Bolton, S.: *Lives of Girls Who Became Famous*, Thomas Y. Crowell Company
4. Franklin, Benjamin: *Autobiography*, The Macmillan Company
5. Marden, O. S.: *How They Succeeded*, Lothrop, Lee and Shepard Company
6. O'Shea, M. V.: *Newer Ways with Children*, Greenberg Company
7. Parkman, Mary R.: *Heroines of Service*, The Century Company
8. Smith, William Hawley: *All the Children of All the People*, The Macmillan Company
9. Smith, William Hawley: *Evolution of "Dodd,"* Rand McNally and Company
10. Wade, Mary: *Leaders to Liberty*, Little, Brown and Company
11. Wade, Mary: *Pilgrims of Today*, Little, Brown and Company

12. Wade, Mary: *Real Americans*, Little, Brown and Company
13. Washington, Booker T.: *Up from Slavery*, Doubleday, Doran and Company

IV. Observation in the grades

To get an idea of the methods of teaching used and the work to be accomplished in each grade

A discussion of the work observed

V. Visits to other schools

A country school, Kaukauna Rural Training School, Oshkosh Normal School

VI. Book reports on books read from the selected list

VII. Reading chart

Have the names written on the chart and the list of books each girl has read. Choose the number of books to be read and give a gold star to each one who has read the prescribed number.

VIII. Choose officers

President

Vice-President

Secretary

Treasurer

Have the girls conduct the meetings; have weekly dues to be used for outside trips.

IX. Additional references

1. Bain, Winifred E.; Gurns, Gertrude; and Van Sistine, Eva Jane: *A Practical Handbook for Students in Observation, Participation and Teaching in Kindergarten, First, Second and Third Grades*, University of Chicago Press
2. Burgess, Thornton W.: *The Burgess Flower Book*, Little, Brown and Company

3. Kirkpatrick, Marion : *The Rural School from Within*, J. B. Lippincott Company
4. Riis, Jacob : *The Making of an American*, The Macmillan Company
5. Wade, Mary : *The Wonder Workers*, Little, Brown and Company

WEEKLY REPORTS

Weekly Report of Teachers' Club
Leader _____

Date Jan. 22

1. Plan for next week
Book reviews
Each member to bring in some article of interest to the club
2. To-day's aim
To organize and to formulate plans for the work to be covered during the year
3. Method
Discussion of the purpose of the club
Discussion of the work done last year and what the club would like to do this year
4. Report of work accomplished
 - (a) Good questions asked
Are we going to visit the different grades this year?
May we visit the Oshkosh Normal?
 - (b) Good contributions
The suggestion was made that we pay two cents a week dues.
 - (c) Books read
 - (d) Report of what was done
The Teachers' Club, with nine members, started with a

“bang.” With the exception of two members the girls present had been in the club last year. They discussed in a very interesting way the aim and purpose of the club and what was accomplished last year. It was decided to work along the same lines. Each girl is to read fifteen books from the list of books for our work. A red star is to be given for reading five books, and a gold star for having read fifteen books. Two members offered to make a reading chart. We planned to have book reviews during the year, to visit the different grades, country school, Kaukauna Training School, and Oshkosh Normal. Informal discussion will be held after the observation. We also decided to have each member bring in magazine articles and clippings that would be of interest to the club, and one member was appointed to paste these articles in a book.

A motion was made and carried that we pay dues, two cents a week, so as to have money in the treasury when we want to take trips. It was also decided to have various sales to help swell the bank fund.

Two committees were appointed, one to get the list of books available in the school library for our use from Miss —— and another to get the list from the Public Library from the librarian.

A formal ballot was cast and the following officers were chosen :

President — Esther

Vice-President — Trydolan

Secretary — Marie

Treasurer — Mildred

We talked about the duties of the different officers.

Weekly Report of Teachers' Club
Leader _____Date Jan. 29

1. Plan for next week

To continue the book review that was started to-day, *Lives of Girls Who Became Famous*; to bring in magazine articles and clippings

2. To-day's aim

To keep up the interest displayed in the first meeting

3. Method

By interesting books reviews and by reading the articles contributed

4. Report of work accomplished

(a) Good questions asked

May we have a sandwich sale to get more money in the treasury? (The girls are anxious to have plenty of money to take several trips.)

(b) Good contributions

An interesting article brought in by one of the girls about the training school at Kaukauna

(c) Good contributions

Reading done

Lives of Girls Who Became Famous

A Schoolmaster of the Great City, read by Rosella

(d) Report of what was done

The meeting began promptly at eleven o'clock with nine members present. The President, Esther —, conducted the meeting in a very creditable manner. Roll call was taken and routine business transacted. The Treasurer reported thirty-three cents in the treasury. Minutes of the last meeting were read

and corrected. The committees on books handed in the lists obtained at the Public Library and Lincoln School library. Each girl chose a book to read.

The girls voted to have a sandwich sale next Wednesday in the Lincoln School, to help swell the treasury. Rosella — gave a very interesting report on the lives of Helen Hunt Jackson and Frances Willard. It was decided to have Rosella continue her review next week as there was little time left for the review after the business had been finished.

The meeting was adjourned at 11:45.

Weekly Report of Teachers' Club
Leader _____

Date Feb. 5

1. Plan for next week

Visit to Miss ——'s first grade; pupils to bring in articles and clippings

2. To-day's aim

To get in touch with worth-while things pertaining to the teaching profession

3. Method

By books and magazine articles and clippings

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

One of the girls brought in several very good clippings.

(c) Books read

The Hoosier School Boy

The Rural School from Within

A Dutch Boy Fifty Years After

Evolution of "Dodd"

Lives of Girls Who Became Famous

Jean Mitchell's School

Pilgrims of Today

A Schoolmaster of the Great City

(d) Report of what was done

The meeting started promptly at eleven o'clock. It was called to order by the President. The minutes of the last meeting were read and approved, also the Treasurer's report.

The sandwich sale which was to have been held last week will be held next Tuesday in the Lincoln School.

Rosella ——— was to have finished her book review, *Lives of Girls Who Became Famous*, but was absent and none of the other girls were ready with their reviews. Esther ——— had brought several very interesting articles on educational problems; so she read them for us.

The meeting adjourned at eleven forty-five.

The girls have shown a keen interest in the books they have read and are reading.

Weekly Report of Teachers' Club

Leader _____

Date Feb. 12

1. Plan for next week

Visit to Miss ———'s first grade

2. To-day's aim

To get some idea of first-grade teaching

3. Method

A short visiting period in the first grade

4. Report of work accomplished

(a) Good questions asked

- (b) Good contributions
Good articles on school problems

- (c) Books read
The Brown Mouse
Phelps and His Teachers
A Schoolmaster of the Great City

- (d) Report of what was done

Our original plan was to visit Miss ——'s first grade but due to illness she was unable to have us visit her room. We therefore spent fifteen minutes in Miss ——'s first grade in the Columbus School. We observed an arithmetic class. The children were learning number combinations. Miss —— taught it in a very interesting way, carrying out the story idea. The rest of our period was spent in the usual way. We had our business meeting first. The various reports were read. The Treasurer reported that \$2.90 was made by the sandwich sale. The committee reported that there were several new books in the Lincoln School and Public Library to be added to our list. Some of the girls have already read four or five books. Rosella —— gave an interesting review of the life of Helen Hunt Jackson the last few minutes of the period.

The meeting adjourned at 11:45, to meet at 10:30 next Thursday for observation in Miss ——'s first grade.

Weekly Report of Teachers' Club
Leader_____

Date Feb. 19

1. Plan for next week

To discuss the work observed in Miss ——'s first grade. If there is time, we shall have a book report.

2. To-day's aim

To get an idea of the methods of first-grade teaching

3. Method

By observation in the first grade

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Good articles brought to class

(c) Books read

The Rural School from Within
Evolution of "Dodd"

Jean Mitchell's School

Lives of Girls Who Became Famous

The Hoosier Schoolmaster

The Teacher

Phelps and His Teachers

(d) Report of what was done

Our club met to-day at ten thirty, recess time, for observation in the first grade. The girls had a splendid opportunity to see some fine work done by a first-class teacher.

Miss —— first gave us an example of silent reading, having the children's names and certain directions printed on cardboard. The children read these cards and followed directions. It was interesting to note the promptness with which they carried out this work. Before taking up the reading lesson, Miss —— had a flash drill of phrases on the board. This consisted of phrases that were to be found in the lesson. The reading lesson was a new one and the children had had very little preparation on it, but it was surprising to see how readily they thought out

the words and the expression with which they read.

We then observed a lesson in number combinations. The children had learned the combinations of 3, and Miss —— had them give them orally first. Then they put small white circles on a piece of paste-board that had been covered with black outing flannel. Miss —— carried out the story idea of Mrs. Three putting her children to bed, three upstairs and three downstairs, working out the various combinations in that way. Then the teacher introduced the combinations of 4, so that we might see how a new combination was approached and developed. This was a very enjoyable and profitable observation, and I am anxious to see how much of it "went over" with the girls.

The last few minutes of the period were spent in making our plans for next week.

Weekly Report of Teachers' Club
Leader _____

Date Feb. 26

1. Plan for next week
To visit Miss ——'s second grade
2. To-day's aim
To have the girls understand the important points in last week's observation — the strong points of the teacher and the kind of work done
3. Method
By a discussion of last week's observation in first grade
4. Report of work accomplished
 - (a) Good questions asked
What would you consider the strong points of the

teacher? Don't you think some people are born teachers?

(b) Good contributions

Good clippings

(c) Books read

The Teacher

All the Children of All the People

Evolution of "Dodd"

Maggie McLanahan

Phelps and His Teachers

(d) Report of what was done

Before the regular work was taken up, the girls wrote the names of the books they had read on the chart. It is very gratifying to see how anxious the girls are to read these splendid books, and from their discussions I cannot help but feel that the influence of these books will be lasting, even if these girls never become teachers. Out of ten in the group, six girls have read six books. Each is supposed to read fifteen.

After the usual business had been transacted the girls took up the discussion of our observation. I was pleased to see that the girls had grasped the important points. These are the outstanding things which they mentioned:

(1) Patience of the teacher

(2) Interest displayed on the part of the children due to the teacher's manner and methods of teaching

(3) Interesting ways in which the number combinations were developed through the story idea

(4) Lack of restlessness due to the various little games and exercises that occurred during the period

- (5) The eagerness the children displayed in their work and play, especially in their reading

The meeting adjourned to meet next Thursday at ten thirty for observation in Miss ——'s second grade.

Weekly Report of Teachers' Club
Leader _____

Date March 5

1. Plan for next week

To discuss the work observed in Miss ——'s second grade; book review, *Jean Mitchell's School*

2. To-day's aim

To get an idea of the work done in the second grade as compared with the work done in the first grade

3. Method

By observation in Miss ——'s second grade

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Magazine articles

(c) Books read

The Hoosier School Boy

The Hoosier Schoolmaster

Phelps and His Teachers

A Dutch Boy Fifty Years After

The Brown Mouse

(d) Report of what was done

The Teachers' Club met at ten thirty to observe Miss ——'s second grade. She had planned her program so that we could gain a general idea of the work done in this grade.

The first demonstration was by the A class. We saw

the development of a reading lesson that the children had not seen before. It was surprising to see how quickly they got the thought from the printed page. We then saw what was written on cards acted out by children in the B class. They read the cards that were held out and then acted what was written on the cards. Another silent reading lesson was with cards on which a story was printed. The children read these cards and then acted the story.

Miss —— gave a lesson in number work, in subtraction and division, having individuals give the answers after she had written the numbers on the board and erased them; also by flash cards, on which were written the combinations. Two children recited at one time, having a race to see who could answer first.

Miss ——'s methods of teaching were similar to those of Miss —— and were carried out in the same interesting manner. At all times the children were eager and ready to recite and the interest never lagged. It will be interesting to have the girls compare the two observations.

The girls are going to make some envelopes for seat work for Miss ——.

Weekly Report of Teachers' Club

Leader _____

Date March 12

1. Plan for next week
To visit Miss ——'s third grade
2. To-day's aim
To plan the envelopes the girls are to make for Miss ——

and to discuss a number of things to be brought up before the club

3. Method

By discussion

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Magazine articles

(c) Books read

The Hoosier Schoolmaster

A Dutch Boy Fifty Years After

The Brown Mouse

Up from Slavery

Rainbow Gold

Phelps and His Teachers

Maggie McLanahan

(d) Report of what was done

Our work to-day was somewhat different from what we had planned, due to various things that had to be discussed. We had planned a discussion of last week's observation and a book review but we did not have time for either.

After the usual business meeting, including the reading of the Secretary's and Treasurer's reports, we planned the envelopes the girls are to make for Miss ——. There are to be five different kinds, a dozen of each kind; so the girls have quite a bit of work to do, but they are willing to do it. After this had been planned we talked about the books on our list and checked them up. Two of the girls volunteered to return and renew the books from the city library. The girls decided on the books they want next and

are going to read the books from the library that bear directly on the teaching profession.

We already have four dollars in our treasury, but since the girls are anxious to increase our bank account, they have decided to have a candy sale next Wednesday at the Lincoln School. The President appointed two girls to advertise the sale in the different rooms and others to do the selling.

The meeting adjourned at eleven forty-five to meet next Thursday in Miss ——'s third grade of the Lincoln School.

The girls are still very much interested in their club work and hope they can visit the Oshkosh Normal this year.

Weekly Report of Teachers' Club
Leader _____

Date March 19

1. Plan for next week

To discuss the observations in the second and third grades and to have a book review if time will permit

2. To-day's aim

To get an idea of the work done in the third grade as compared with that done in the second grade

3. Method

Observation in the third grade, Lincoln School

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

Magazine and paper articles

(c) Books read

A Schoolmaster of the Great City

Heroines of Service

The Hoosier School Boy

The Wonder Workers

(d) Report of what was done

Our club met at ten thirty Thursday for observation in Miss ——'s third grade. The first demonstration was by the B class. They read and dramatized a story from their readers. The A class then read a portion of the story *Black Beauty*. It was surprising to hear the children read so well and smoothly and with so much comprehension.

The whole class then studied spelling for five minutes and wrote their lesson. The children who had 100% acted as teachers and corrected the other children's papers. Then the class had a test in arithmetic — addition, subtraction, and division. It was surprising to see how quickly some of the children could do their problems and prove them.

There was very good order in the room; the children were busy all the time and were interested in their work.

I am anxious to see how the girls compare the work in the first three grades.

Weekly Report of Teachers' Club

Leader _____

Date March 26

1. Plan for next week

To visit the fourth grade in the Lincoln School

2. To-day's aim

To compare the work taught in the third grade with that taught in the other grades we have visited

3. Method

By a discussion of the observations

4. Report of work accomplished

(a) Good questions asked

Would you consider the teacher good in discipline?
Why?

What is the strong point the author wishes to bring
out in *Phelps and His Teachers*?

(b) Good contributions

Magazine articles

(c) Books read

Heroines of Service

Rainbow Gold

Where Shall I Be?

The Hoosier School Boy

Pilgrims of Today

The Hoosier Schoolmaster

Maggie McLanehan

The Wonder Workers

(d) Report of what was done

The Teachers' Club met at 10:45 in the Columbus kindergarten. The girls fixed their reading chart first. One of the group has read fourteen books; two others have read ten; and two have read eight. The girls are anxious to get the books and are very much interested in them. The meeting was called to order by the President. In the absence of the Secretary, Rosella — took the minutes of this last meeting. The Secretary did not send her book; so there were no minutes read of the previous meeting. The Treasurer reported seven dollars and five cents in the treasury. The girls who made the envelopes for Miss — reported that they had finished them and that most of them had been handed to Miss —.

The next part of the meeting was spent in discussion and comparing observations in second and third grades. The girls noticed the strong points in each lesson, the attitude of the teacher and pupils toward each other, the interest shown in the work, especially in the second grade, and the various devices used to promote interest.

Augusta — gave a very interesting report on *A Schoolmaster of the Great City*, showing the modern ideas of teaching school and how they were developed by a big man with a big purpose.

Evelyn — also gave a very interesting book review of *Phelps and His Teachers*, showing how some children are misunderstood by their teachers and how it hinders their development.

The meeting adjourned to meet at the Lincoln School next Thursday for observation.

We have two new girls in our club.

Weekly Report of Teachers' Club
Leader _____

Date April 2

1. Plan for next week

To discuss the observation in the fourth grade; book review

2. To-day's aim

To get an idea of the work done in the fourth grade; methods of teaching

3. Method

By observation in the fourth grade

4. Report of work accomplished

(a) Good questions asked

May I help the slow children after school with their arithmetic?

(b) Good contributions

(c) Books read

Heroines of Service

The Brown Mouse

(d) Report of what was done

The Teachers' Club met at ten thirty on Thursday at the Lincoln School for observation in the fourth grade. The first demonstration was a drawing lesson. The children are making Easter place cards. The directions given by the teacher were clear and concise, and the children were able to understand and carry them out without any difficulty.

Next came an arithmetic lesson. The children had had long division just a few days. The teacher did several problems on the board with the aid of the children. They told her just what steps to take and how to solve the problems. Then the children did some problems on their papers and compared their answers. Next they did all the problems written on the board. The teacher explained each step clearly and in an interesting way, and the children seemed to understand just how to go at their work. I learned afterwards that all but one child received 100% in arithmetic that day.

The next class was a reading lesson. The children were timed to see how many words they could read in a minute and how well they could comprehend what they had read. When the minute was up each child was given a piece of paper. The teacher asked several questions from the lesson that could be answered by "yes" or "no." Most of the class had

a 100% lesson. The number of words read varied from 150 to 743.

The club will meet in the Columbus kindergarten next Thursday for a discussion of the work observed.

Weekly Report of Teachers' Club

Leader _____

Date April 16

1. Plan for next week
To visit the fifth grade at the Lincoln School
2. To-day's aim
To compare the observations in the first four grades
3. Method
By a discussion of the rooms observed
4. Report of work accomplished
 - (a) Good questions asked
What is personality?
 - (b) Good contributions
In discussing our observations the girls referred to some of the books they had read by way of comparison.
 - (c) Books read

<i>The Brown Mouse</i> <i>Real Americans</i> <i>A Schoolmaster of the Great City</i> <i>A Dutch Boy Fifty Years After</i> <i>The Rural School from Within</i> <i>Phelps and His Teachers</i>	<i>The Burgess Flower Book</i> <i>Pilgrims of Today</i> <i>Rainbow Gold</i> <i>Children's Hour</i> <i>How They Succeeded</i> <i>Jean Mitchell's School</i>
---	---
 - (d) Report of what was done
The Teachers' Club met at the Columbus School at 10:45. The girls took care of their reading chart

first. Three of the girls have read the required number of books, fifteen, and three others have almost reached this goal.

The meeting was called to order by the President. The Secretary read the minutes of the last meeting. Additions and corrections were made. The Treasurer reported over eight dollars in the treasury. We discussed the books to be read and decided not to use those from the library any more, because there is material enough in the Lincoln library. The girls are anxious to take a trip to the Oshkosh Normal, but it was finally decided to let the matter rest until I had talked it over with Mr. —.

We then entered into the discussion of the day. The girls compared the methods of teaching in each grade, the amount and kind of work done, and the attitude of the teacher and children. I cannot help but feel that these observations have helped the girls in many ways. They said they wished arithmetic had been emphasized as clearly to them in the lower grades as it is now.

We gradually drifted into a discussion of what helped to make a person a success. I then told the girls the meaning of personality and said that one's character was the greatest factor in helping a person to become a success or otherwise. One of the girls said that only good-looking people got anywhere. I tried to point out to her that looks and clothes do not count for much only so far as neatness is concerned.

The meeting was adjourned at 11:45 to meet next Thursday at the Lincoln School.

Weekly Report of Teachers' Club
Leader _____Date April 23

1. Plan for next week

To discuss the observation in the fifth grade

2. To-day's aim

To get a general idea of the work done in the fifth grade

3. Method

By observation

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

(c) Books read

*Rainbow Gold**The Wonder Workers**A Schoolmaster of the Great City*

(d) Report of what was done

The Teachers' Club met at the Lincoln School for observation in the fifth grade. The children were having a study period in geography at ten thirty. At eleven o'clock they had an oral review lesson in geography preparatory for the examination on Friday. The interest the children took in their work was very noticeable. They were all well prepared and eager to answer the questions. The teacher was quick and alert and eager to hold the attention of her class all during the period. The next class was in spelling. The children had chosen captains and each captain chose children for his side. After the lesson they added up the standings to find which side had won. There was

keen competition and each child was anxious to keep up the standard of his side.

The nature study class was very interesting. One child gave a report on a new bird and several others described other birds that they had studied. They emphasized the important points — size, color, call, habits, eggs, where the birds build their nests, when they migrate and return.

The club will meet at the Columbus kindergarten next Thursday unless we decide to visit some other school.

Weekly Report of Teachers' Club
Leader _____

Date April 30

1. Plan for next week

To visit the training school at Kaukauna if the weather permits; otherwise, to observe in the third grade, Columbus School

2. To-day's aim

To see how much the girls gained by their observation in the fifth grade

3. Method

By discussion and comparison

4. Report of work accomplished

(a) Good questions asked

What do you consider to be the teacher's strongest points?

(b) Good contributions

Magazine articles

(c) Books read

Glengary School Days

Up from Slavery

A Dutch Boy Fifty Years After

Rainbow Gold

(d) Report of what was done

The club met at the Columbus kindergarten at 10:45. The girls took care of their reading chart first. Four of the girls have a gold star for having read fifteen books. Two girls have read eighteen books.

The meeting was called to order by the President. The Secretary had forgotten her book; so she gave from memory the minutes of the last two meetings. The Treasurer reported over eight dollars in the treasury.

Under "Old Business" we continued the discussion of a trip and finally decided to go to Kaukauna next week if the weather permits.

The meeting was then open for the discussion of our last observation. The girls all took an active part and I can tell now that they really know what to look for during their visits. They did not all agree on some points and I was glad to see that they were able to form their own opinions. They noticed the very keen interest on the part of the children and teacher and the well prepared lessons. It is a great help to the girls to compare the work done in the different grades and the methods used; also the attitudes of the different teachers.

Miss —— offered to have some of the girls from our club help her with some of her pupils in reading. The girls are very anxious to do this.

Meeting adjourned to meet at the appointed time next Thursday morning.

Weekly Report of Teachers' Club
Leader _____Date May 7

1. Plan for next week
To meet in the Columbus School for discussion
2. To-day's aim
To get an idea of the preparation needed to be a rural school teacher
3. Method
By observation in the rural normal school at Kaukauna
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read
 - (d) Report of what was done

The Teachers' Club met at eight fifteen at the Lincoln School and took the 8:30 bus for Kaukauna to visit the Rural Normal Training School.

The session opened at nine o'clock. We first visited a class in geography, composed of students who are preparing to teach. After the students had discussed the lesson they were asked to make out ten questions they would give a class. These questions were discussed and answered.

The rest of the morning was spent in the training department, where we saw the girls doing their practice teaching. We visited the different grades and observed classes in reading, spelling, and arithmetic. The methods used were similar to those used in our own school and in any well organized normal school. The classes were small and each child was able to have individual attention.

One of the most interesting classes that we visited was the first grade. The drill in phonics was interesting and each child had a dictionary that he had made of heavy paper and letters on the edge, like our dictionaries. As the children learn new words they write them in their books, thus enlarging their vocabularies, learning to use a dictionary, and also learning to read and write.

We ate our lunch at Kaukauna and took the 12:30 bus back to Appleton.

SAMPLE EXTRACTS FROM THE MINUTES OF THE CLUB

The regular meeting of the Teachers' Club was held Wednesday, April 26th. The meeting was called to order by the President and the minutes were read. Miss —— and Mrs. —— gave some interesting talks on teaching the kindergarten. Mrs. —— gave some good suggestions also. She gave some points on what a kindergarten teacher ought to have in order to be a good teacher. (1) A good teacher must be cultured and refined. (2) Every teacher must possess a world of patience. (3) She must be artistic; that is, she must be able to fix a pretty room. (4) She must have a well modulated voice because, if she talks loud, the children will naturally talk loud. (5) She must be able to speak good English. (6) She must have an understanding of children in order to give them what they need. (7) She must be able to put herself in the place of the child. (8) She must be a good student. (9) She must be able to sing and play fairly well. Miss —— gave some very good points on teaching the first grade. Some very good questions were asked of her, such as: "Why do you divide your class into Birds, Bees, and Butterflies?" "Do they have drawing in the first grade?" These questions arose from a visit that the club made Wednes-

day morning to the kindergarten and first grade of the Columbus School. The girls all enjoyed the visit and I'm sure they all learned something from it.

The regular meeting of the Teachers' Club was held May 3d, in the kindergarten of the Lincoln School. The meeting was called to order by the President and the minutes were read.

The two subjects under discussion were: "The Exhibit" and "The Suspending of Two Boys from the Eighth North." Under "The Exhibit" some very good suggestions in favor of it were given: (1) The exhibit is a good thing because it gives the parents a chance to compare their children's work with other children's work. (2) It shows the advance that children make from one grade to another. (3) By seeing other children's work the children get ideas about how they would like to do their work. (4) Children look forward to the exhibit from the first of the year and they do the best they can so that they will have a lot to exhibit. (5) In the case of sewing, many parents refuse to buy material for the children to work with but when they see the exhibit they are willing to buy the material.

On the other question or subject several different views were expressed. Some thought that it wasn't exactly right to expel the boys because they were not the only boys who were "acting up."

Another question discussed was, "Is it right to give children home work?" Not many seemed to think it was necessary and Miss —— said that she thought it was a personal problem with the teachers and if they wanted to give it they could. . . . However, if it is clearly best for the pupils, home work should be given; but it should not be made too burdensome.

SAMPLES OF PAPERS WRITTEN BY MEMBERS OF THE
TEACHERS' CLUB*Why I Want to Be a Teacher*

I want to be a teacher because I like boys and girls. I enjoy having them about me, talking with them, working with them, playing with them, and having their confidence and affection.

I want to be a teacher because the teacher works in an atmosphere of idealism, dealing with minds and hearts, with ideas and ideals, and broadening the minds of her pupils by teaching them in a practical way as well as theoretical, for theory without practice is of little value. I also think that exercises and athletics are essential in good teaching.

I want to be a teacher because I distinctly remember how anxious I was when I went to kindergarten not to miss anything that was being taught and I think the modern method of teaching the little ones in a playful way, which is in practice here, does not tire them but causes them to look forward to the next day with expectation and anxiety to be there. I think it will be interesting to plan a new program for each day which will also be interesting to the children. Years ago some people thought the kindergartens worthless but in the last few years most of the people awoke to the fact that they are of value to help broaden the minds of the children and to prepare them for the first grade.

I want to be a teacher because the hours of work are not too long, and the work is varied and does not become monotonous and also gives one time for recreation and further study.

I want to be a teacher because the foundation of every business and profession has its beginning in the schoolroom and in a great many instances the children's future is mapped and planned by their teacher. Some people happen to fall into

their vocations for life by mere chance and therefore to-day you will find a great many people who are in a business or job which they do not like or which does not appeal to them. The teacher may help to avoid this.

When I entered the seventh grade I decided to become a teacher and this year in the eighth grade I was deeply impressed by the way my teachers taught their scholars, which will help me when I also become a teacher. I also think that a club which was formed at the school this year has helped the scholars of the eighth grades who intend to become teachers very much in that vocation.

I want to be a teacher because in that profession I will be doing the work I like best.

I am anxiously looking forward to the time when I will enter high school and can continue my studies although I regret leaving my teachers, who have been so kind to me during my years in the grade schools.

Another reason why I want to be a teacher is because there is no work in which men and women engage which more directly serves society and state, for they mold the Nation's citizenship.

The True Teacher may well be proud of the title, for her work is akin to that of the Master Builder, the creation of a temple, not made with hands.

A Teacher's Responsibility

As a teacher I believe that the character and safety of a country depends upon the education of its children. For a nation to succeed its children must be educated. The nations of history that have been the most successful are the nations that gave time and thought to education.

Sparta lived for nine hundred years and a Spartan took pride in the education of his physical self.

Athens lived for seven hundred years and the Athenian culture was the marvel of the day.

Rome lived for five hundred years and the Roman idea of law and order is the foundation for all law and order to-day.

These nations survived so long as they paid attention to education, but when their thoughts went astray so did their national foundation and as a result we know of these nations only for what they were and not for what they are.

Have we as a nation anything to learn from these historical records? Can we benefit by their experiences or must we blindly tread our way heedless of the future? Do conditions in America warrant our attention? Do we remember that the physical examination of our young men during the war revealed that one out of every three men was physically unfit for service and the alarming part is that most of these defects could have been remedied while young? Bad tonsils, adenoids, neglected teeth, mal-nourishment, eye strain, and numerous others were the simple causes of much trouble. What would the ancient Spartan think of this? The intelligence test of these same men revealed the fact that the average American is not much above the average fifth-grade child in intelligence. With all our vaunted pride in our public school system, are we meeting our situation squarely and building thoroughly enough so that America may avoid the rocks which sent Athens, Sparta, and Rome to destruction?

As a teacher I believe that I can so conduct myself that I can help avoid the rocks of destruction by imparting to the youth in my charge a high standard of accomplishment and a noble conception of life.

I believe that in the soft virgin soil of their souls I may plant the seeds of sweet scented flowers or of life-giving fruits; I realize the momentous thought that the little thoughtless children by whom I am surrounded are to become men of the

approaching age. That little child who is amusing himself with drawing triangles and circles under proper training might hereafter become a Pascal, that little dirty urchin who is plucking flowers by the wayside may become the poet or the orator of his age, that thoughtful feeble boy who is watching the effect of the steam as it blows and puffs from the teakettle may become another Watt, destined to multiply the resources of our national wealth. Who knows?

I realize that as I build a life I build a nation. Building a life is similar to building a house, because the purpose for which one is building determines how the building is done. If one were about to begin the construction of a dwelling house, what questions would most likely be uppermost in his mind? If this house were intended for his own use, he would doubtless consider among other important matters those of comfort, convenience, arrangement, attractiveness, appearance, strength, and durability. The great variety of dwellings to be seen on every hand is outwardly expressive of the great variety of ideals in the minds of the people who construct them. No matter by what means, it may be said that he who builds a house thereby illustrates in concrete form his inner character. With practically the same quality of materials, one man will construct a house apparently with the thought that its chief purpose is to be looked at. Much work and expense will be put upon outer show and embellishment, while in its inner arrangements it may be exceedingly cramped and thoughtlessly put together. Another will erect his building with a thought of placing it on the market. Cheap workmanship, weak and faulty joinings, and the like will be concealed by some thin covering meant to last until a profitable sale has been made and some innocent purchaser caught with a mere shell of a house in his possession. Occasionally, however, there is found a man whose plans conform to such ideals as those first named.

As with the construction of a house, so it is in some measure with the building of a character. Some lives apparently are constructed to look at, that is, with the thought that adornment and a mere appearance of worth and beauty constitute the essential qualities. Other lives are in a sense made to sell. Not infrequently parents are found developing their boys and girls as if the chief purpose were to place them somewhere in the best possible money market. A life is worth only as much as it will bring in dollars and cents, is apparently the predominating thought of such persons; then occasionally, a life is built to live in, that is, with the idea that intrinsic worth constitutes the essential nature of the ideal character.

But what is a good life? And why is not this precisely the question for all teachers to ask themselves at the time they begin the development of the lives of the children under their direction? Assuming a fairly sound physical and mental inheritance on the part of the child, and the given environment as the raw material of construction, what ideals should I as a teacher have uppermost in mind before undertaking the tremendously important and interesting duties of constructing worthy manhood and womanhood out of the inherent nature of their children?

I should aim to build good health for all children under my charge, for healthy children mean a healthy nation. I should aim to build usefulness into their lives, to make them contribute something of value to society, for one who does not contribute, no matter what his social standing may be, is a drag and a burden to the nation. One who produces and contributes may be said to be cultured. I would aim to build moral strength, for without moral strength physical and intellectual strength is impossible. When Rome forgot her morals, decay set in. I would aim at social efficiency and coöperation, for I believe I am my brother's keeper; without

this spirit, democracy is impossible. I would aim to build happiness because happiness paves the way for progress. Progress depends upon work and work leads to happiness.

These I believe can be accomplished in the classroom and because a nation imbued with these ideals and characteristics is a strong nation and a safe nation I want to have a part in stamping these ideals and characteristics upon my country.

CHAPTER XVIII

ARTS AND CRAFTS CLUB

OUTLINE OF WORK

- I. Purpose
 - A. To help those pupils who have a talent and a strong feeling for art, who wish to know more about art itself and the beauty found in making many useful articles, and who wish to give expression to their artistic desires
- II. Aim
 - A. To train the aesthetic sense of the individual
 - B. To bring out freedom of expression
 - C. To open the mind of the student to the fact that he can be himself, and that he can draw inspiration from nature and his immediate surroundings
- III. Organization of the club
 - A. Election of officers
 - B. General business discussion
- IV. What does the term "arts and crafts" mean to you?
 - A. A means by which we may express our sense of beauty and harmony in actually making some beautiful thing to be placed in the home, used as a personal adornment, or sold in the commercial field so that others may benefit by it
- V. What are the requirements necessary for one to carry on this work?

- A. One must have imagination and a strong feeling for beauty and be willing to work intelligently and persistently.

VI. Practical work creating design and individuality through

A. Design

1. What is design?

(a) Design is arrangement, and drawing is the representation either of an idea or an object.

2. How do the historic methods compare with the modern methods of teaching design to the art student to-day?

(a) Historic art may teach one to design, but it alone cannot teach him design.

(b) Our modern methods allow freedom of expression and also urge actual construction

(c) To know design, one must know all the steps beginning with the idea to the completion of the object.

(d) Art used to be thought of as an ornament. Now an interest in crafts is constantly growing in foreign countries, and in our country as well. Attempts are being made to teach the elements of arts and crafts in schools.

3. Reference

(a) *Art Craft for Beginners*

4. Appreciation

(a) Method: Designs made on models of paper cut to fit the top of a cake or candy box. The shape was first divided into units and then just one good design made, which was

repeated after the design had been cut out and traced on tonal paper. Then parts were mounted on the cover and covered with shellac.

B. Enameling

1. How can one get the best results in applying enamel to vases, jars, shoe trees, etc?

(a) Use long even and sure strokes, covering the surface with as few strokes as possible.

2. Reference

(a) Directions are given with enamel.

C. Ribbon art

1. What part is ribbon playing in our field of fashion to-day?

(a) It gives a picturesque quality to a simple gown, making it more interesting and different.

(b) It adds color to a dull garment.

(c) It is an inexpensive trimming.

(d) It may be used for or on dresses, hats, blouses, gifts, novelties, hair ornaments, and scarfs, to such an extent that it is almost a necessity.

2. Reference

(a) *Ribbon Art*, Vahrah Craft Edition

3. Application

(a) Method: Shoe trees were trimmed. Ribbon was bound around the tin of the enameled shoe trees for a covering. Bows and rosettes were also made to add to the attractiveness of the article.

D. Illustrated motto cards

1. Is it worth while to spend money and time on framed motto pictures?

- (a) It is. They are a means of expressing our thoughts for our friends and relatives in a more beautiful way than we could otherwise express them.

2. Reference

- (a) Snow, Bonnie, and Froehlick, Hugo: *Industrial Art Text-Books*, Books I-VIII

3. Application

- (a) Method: Some suggestive and simple object or picture was first painted on paper, and then a poem was printed either in color or black India ink below the picture or arranged in some pleasing manner on the card. The card was finally framed.

E. Wax modeling

1. Is sealing wax art a fad or has it come to stay?

- (a) The development of sealing wax for decoration purposes is growing more and more, while new uses are being discovered and new designs are constantly being created.

- (b) It gives endless variety at small cost; a touch of color may be just the thing to give the garment or some nook or corner of the room character.

2. Reference

- (a) *Sealing Wax Art*

3. Application

- (a) Method: Wax was modeled from a crude or semicrude state into something having form, design, and decoration. Vases were covered; bracelets and pendants were decorated.

F. Gesso work (either *gesso* or *jesso*)

1. What is gesso modeling?

(a) Gesso modeling is an old art, revived and applied to modern hand crafts, which produces fascinating and beautiful designs.

2. References

(a) Tessin, Louise D.: *Jesso Modeling for Modern Handicrafts*

(b) Lemos, Pedro J.: *Applied Art*, p. 287

3. Application

(a) Method: A design traced on a wooden object is brought into relief by gessoing. This is then painted or finished with oil paints. Models may be book ends, picture frames, French mirrors, or lamp shades.

G. Stenciling

1. Definition

(a) Stenciling is the stippling of oil paint on material through perforations in a stencil card made by tracing and cutting out a design with a very sharp instrument, as a sharp pointed knife or scissors.

2. References

(a) Lemos, Pedro J.: *Applied Art*, pp. 283-284

(b) *Graphic Drawing*, Book II

3. Application

(a) Method: In addition to using sharp knives for cutting, a stiff brush must be used as well. The material should be well padded and the design firmly tacked down with thumb tacks. Table runners and curtains are attractively decorated in this way.

H. Block printing

1. Block printing may be termed a twin brother of stenciling. Both are used to transfer designs to cloth.
2. References
 - (a) Snow, Bonnie, and Froehlick, Hugo: *Progressive Drawing*, Book VIII, p. 17
 - (b) Lemos, Pedro J.: *Applied Art*, pp. 285-286

I. Basketry and weaving with paper rope

1. What part does basketry play in arts and crafts?
 - (a) Basketry is one of the most fascinating of crafts.
 - (b) The possibility of creating a variety of baskets in every shape and size makes the work unusually attractive.
 - (c) Weaving with paper rope is similar.
2. References
 - (a) *Weaving with Paper Rope*, Dennison Manufacturing Company
 - (b) Seegmiller, Wilhelmina: *Primary Hand Work*, pp. 97-117
3. Application
 - (a) Weaving of baskets, lamp shades, and standards, with either reed or crêpe paper rope

J. Magazine "topic page" suggestions

1. Work done by boys in designing
 - (a) A cover for a boys' magazine
 - (b) Topic pages for the following subjects
 - (1) Sports
 - (2) News items
 - (3) Comics
 - (4) Stories
 - (5) Picture section

K. Notebook work

Each member decided to keep a scrapbook divided into three parts: "Home," "Self," and "Commercial." Pictures, advertisements, news items, and illustrations relating to art were cut out of magazines and papers and pasted in the scrapbook according to the above classifications. This helped the members of the club to see what an important part art is playing in life, especially in the commercial world.

The following books were found useful:

- Dick, Stewart: *Arts and Crafts of Old Japan*, A. C. McClurg and Company
- Lemos, Pedro J.: *Applied Art*, Pacific Press Publishing Association, Mountain View, California
- McKee, Jane W.: *Purposeful Handwork*, The Macmillan Company
- Sanford, F. G.: *Art Craft for Beginners*, The Century Company
- Seegmiller, Wilhelmina: *Primary Hand Work*, Atkinson, Mentzer and Company
- Snow, Bonnie, and Froehlick, Hugo: *Industrial Art Text-Books*, Books I-VIII, Laidlaw Brothers
- Snow, Bonnie, and Froehlick, Hugo: *Progressive Drawing*, Book VIII, The Prang Company
- Tessin, Louise D.: *Jesso Modeling for Modern Handicraft*, Milton Bradley Company
- Wilkinson, Walter: *Various Art Crafts*, No. 2, The Manual Arts Press
- Winslow, L. L.: *Elementary Industrial Arts*, The Macmillan Company
- Graphic Drawing*, Book II, The Prang Company
- Ribbon Art*, Vahrah Craft Edition, Ribbon Art Publishing Company, 354 Fourth Ave., N. Y. C.
- Sealing Wax Art*, Dennison Manufacturing Company, Framingham, Massachusetts

WEEKLY REPORTS

Weekly Report of Arts and Crafts Club

Leader _____

Date Jan. 22

1. Plan for next week
 - (a) Discussion of the introductory chapters of
 - (1) *Art Craft for Beginners*
 - (2) *Arts and Crafts of Old Japan*
 - (b) Practical work — painting of shoe trees and vases
2. To-day's aim
 - (a) Organization of the Arts and Crafts Club
 - (b) Discussion of means of earning money for supplies
 - (c) Members of the club to become acquainted and know the full meaning of the term "arts and crafts"
3. Method
Discussion of aim
4. Report of work accomplished
 - (a) Good questions asked
 - (1) What is understood to be the meaning of the term "arts and crafts"?
 - (2) What are the requirements necessary for one to carry on this work fully?
 - (b) Good contributions
 - (1) It is a means through which we may express our sense of beauty and harmony in actually making some beautiful thing to be placed in a home, used as personal adornment, or sold for commercial reasons so that others may benefit by it.
 - (c) Books read and amount of reading done
 - (d) Report of what was done
The Arts and Crafts Club held its first meeting Thursday morning, Jan. 22, at the Lincoln School. The

order of business was carried on as it is in a legal business meeting. It was decided to have one person act as President and conduct all further business meetings and one person to combine the work of Secretary and Treasurer.

Different members of the club were nominated and voted on by ballot.

A suggestion was made to raise funds for the various supplies to be used during the course. Weekly dues were suggested. This did not carry. A final decision was made to have sandwich and candy sales, one to be held at the Lincoln School on Thursday, Jan. 29, during the afternoon recess, and one the following week at the Columbus School.

Another suggestion made by one of the members of the club was to have an "arts and crafts library," with credit given for the number of books read relating to the work and interest of the club.

The remainder of the time was spent in discussing the real meaning of the title of the course, "Arts and Crafts." The answers were combined and will be found under "4 (b)" of this outline.

Weekly Report of Arts and Crafts Club
Leader _____

Date Jan. 29

1. Plan for next week

(a) Further discussion of

(1) *Arts and Crafts of Old Japan* — Dorothy —

(2) *Art Craft for Beginners* — Jane —

(b) Design — oil painting and enameling of designs on the vases and shoe trees painted to-day

2. To-day's aim

(a) Discussion of *Art Craft for Beginners*Discussion of *Arts and Crafts of Old Japan*

(b) Practical aim — to begin enamel painting, acquainting the class with a simple but effective way of making useful things for the home and self; skill in applying paint stressed

3. Method

(a) Short discussion of books read

(b) Practical work — enameling shoe trees and vases

4. Report of work accomplished

(a) Good questions asked

(1) How can we compare the arts and crafts in Japan with those of other countries?

(2) What is the best way to apply enamel?

(b) Good contributions

(1) Japan is found to be cultured to a degree far beyond our Western standards.

(2) Their arts are full of beauties too refined for our comprehension.

(c) Books read and amount of reading done

(1) *Arts and Crafts of Old Japan*(2) *Art Craft for Beginners*, introductory chapter

(d) Report of what was done

The Arts and Crafts Club held its second meeting Jan. 28, at the Lincoln School. A very short business meeting was held, during which the unfinished business regarding the funds for the club was settled and the work for the following meeting assigned.

The new project, which is to begin at once, was discussed. Each member has decided to keep a note-

book, dividing it into three parts, "Self," "Home," and "Commercial." Clippings, advertisements, and class suggestions are to be placed under the proper headings during the week before the next meeting. It is the aim of the club to try to make art a part of oneself, a part of one's home, and a part of one's work and to become acquainted with the fact that art is playing a very large part in our commercial world to-day. Where would our advertising be without the commercial artist?

The members of the club are keeping on the lookout for news items. Five were read to-day which were very interesting. These articles are going to be kept in a separate "Club News Book."

The rest of the period was spent in enameling shoe trees and vases, both inexpensive articles which are used for "self" and "home." A soft brush was used. Long even strokes were practiced, and the fact that one should not go over the surface after the enamel is set was also stressed.

Weekly Report of Arts and Crafts Club

Leader _____

Date Feb. 5

1. Plan for next week

- (a) To finish up vases and shoe trees (girls)
- (b) Magazine cover design (boys)
- (c) To introduce ribbon novelties as decorations

2. To-day's aim

- (a) To make designs suitable for the class problem
- (b) Discussion of designs and report by Jack —

3. Method

(a) Designs for shoe trees were made on shaped papers.
Those who finished started oil painting on enamel.

(b) Discussion

4. Report of work accomplished

(a) Good questions asked

(1) What are design and drawing?

(2) How do the historic methods compare with the modern methods of teaching design to the art student of to-day?

(3) Can we say that art is becoming an important part of to-day?

(b) Good contributions

(1) Design is arrangement, and drawing is the representation of either an idea or an object.

(2) Historic art may teach one to design, but alone it cannot teach him design. Our modern methods allow freedom of expression and also large actual construction. To know design, one must know all the steps from the idea to the completion of the object. Actual experience is important.

(3) Art used to be thought of as an ornament. Interest in crafts is constantly growing in foreign countries as well as our own country. Attempts are being made to teach at least the elements of arts and crafts in nearly all the schools.

(c) Books read and amount of reading done

(d) Report of what was done

After a short business meeting and the assignment of work for the next meeting a splendid report was given by Jack ——. The report brought out the points

given under "2." This led to a discussion on design and the reading of the following :

I stood in silence and apart,
And wondered more and more to see
That shapeless, lifeless mass of clay
Rise up and meet the master's hand,
And now contract and now expand,
And even his slightest touch obey.

"The joy of the work consists in making the yielding mass obey the art impulse of the mind."

The remainder of the time was spent in making designs, and oil painting over enamel paint.

Weekly Report of Arts and Crafts Club
Leader _____

Date Feb. 12

1. Plan for next week

- (a) Art paper designs for tin candy and cake boxes
- (b) Report on *Industrial Art for Beginners* — Dorothy

- (c) Continuation of ribbon work

2. To-day's aim

- (a) Completion of oil painting
- (b) Introduction of ribbon art
- (c) Boys to work out a cover design
- (d) Reports on *Various Art Crafts*, No. 2 — Paul —
Arts and Crafts of Old Japan — Iris —

3. Method

- (a) Discussion
- (b) Painting and ribbon work

4. Report of work accomplished

(a) Good questions asked

(1) What part does the ribbon play in our field of fashion to-day?

(2) How do we find it is being used?

(b) Good contributions

(1) Paul —, in his report, told of two kinds of drawing, mechanical and free hand. The latter is divided into still life and life models. "Life models" takes up action postures by some living being. Silhouetted profile and human figure work is stressed under this head. Still life takes up inanimate objects, which are less hard to draw. They appeal to more people. Mechanical drawing, on the other hand, is the drawing of many plans for large and small building constructions, machines, and the like.

(2) The points stressed in Iris' report on *Arts and Crafts of Old Japan* were: Love of beauty and nature by the Japanese, which begins in early life when the mother takes her babies to the beautiful cherry blossom festivals; Japanese art is somewhat hard to understand, being more fantastical than the art we are used to seeing. Most of their painting is done in solid black on white or other foundation colors, with silk brocaded frames, which allow one to roll up the pictures. The fact that they do not stress pictures for museums but more for homes is interesting. This is due to the destruction of property by earthquakes. We cannot really say this is a detriment; rather, because of it, more art is seen and appreciated in the everyday life of these people.

(c) Books read and amount of reading done

(1) In reading books for the Arts and Crafts Club the members of the club are allowed to choose that part of any book that interests them most because many books have material in them too difficult and impractical for boys and girls.

(2) *Various Art Crafts*, No. 2

Arts and Crafts of Old Japan, Chap. I

Ribbon Art, read by majority of girls

(d) Report of what was done

The meeting of the Arts and Crafts Club was held Feb. 12 at the Lincoln School. After a short business meeting the reports were given, which have been spoken of under “(b)” Then a brief discussion was taken up on ribbon art and its place in the field of fashion to-day. It was found to give a picturesque quality to a simple gown, making it seem more interesting and different. It adds color to a rather dull-toned material. It is an inexpensive trimming and can be replaced easily. It is used on hats, dresses, blouses, as well as being made into many articles such as bags, gifts, novelties, hair ornaments, and scarfs. While the boys worked on cover designs, the girls worked on their shoe trees and vases. Two new members were taken into the club to-day. They had so improved their work in the remedial sections that they successfully passed their tests.

Weekly Report of Arts and Crafts Club
Leader _____

Date Feb. 26

1. Plan for next week

Work on process of fixing colors, using fixative and shellac

2. To-day's aim
 - (a) To finish designs for candy and cake boxes (girls)
 - (b) To begin cover designs for a boys' magazine (boys)
3. Method
 - (a) Continuation of designing
 - (b) Boys to hand in suggestions on what they would like to find on the covers of magazines they are interested in reading, using their own designs
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (1) Suggestion for a boys' magazine
The cover should show action, sports, or humorous pictures to attract attention.
A cover would also attract the attention of many boys if the cover design pertained to some workshop.
 - (c) Report of what was done
The Arts and Crafts Club met at the Lincoln School Feb. 26. After a short business meeting the members of the club continued with the work started during the last meeting. Illustrations were shown of different circle designs, to give a better idea of how to complete the cover designs for the candy and cake boxes. Some completed their designs and began pasting, while others were still working for suitable designs for their problem.
It has been decided to have the boys work out what they consider a good cover for a boys' magazine in so far as topic plates and designs are concerned. Some of the suggestions given for the cover of the magazine are given under "(b)." One cover started

was that of the workroom for boys and two others were pictures of winter sports.

The meeting adjourned at 11 : 50 A.M.

Weekly Report of Arts and Crafts Club

Leader _____

Date March 12

1. Plan for next week

Continuation of work on illustration of poem or motto

2. To-day's aim

To begin illustrating poem ; to spend a few minutes on the discussion of the material read during the week

3. Method

(a) Discussion

(b) Blocking out designs in preparation of the final design, which is to be painted

4. Report of work accomplished

(a) Good questions asked

(b) Good contributions

The points brought out in the discussion as being important in making a design were : good arrangement, good spacing, an interesting subject, and good coloring neatly put on.

(c) Books read and amount of reading done

Art Education, Books III, IV, VI

Applied Art, one chapter

(d) Report of what was done

The Arts and Crafts Club met at the Lincoln School March 12. After a short business meeting conducted by the President, a brief discussion of design and suggestions for the illustrations of different poems was taken up.

Some of the suggestions given by different members will be found under “(b)” of this outline.

The remainder and greater part of the period was spent in making designs. Everyone seemed interested in the work and some good designs were started.

The meeting adjourned at 11:45 A.M.

Weekly Report of Arts and Crafts Club

Leader _____

Date April 17

1. Plan for next week
Molding with sealing wax
2. To-day's aim
 - (a) To finish motto cards
 - (b) Color and design for those who finished their cards last week
 - (c) To hand in notebooks
3. Method
 - (a) Discussion of work
 - (b) Practical aim — painting motto cards and making conventional designs for color
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read
Sealing Wax Art
 - (d) Report of what was done

The Arts and Crafts Club met at the Lincoln School Thursday, April 16. A short discussion of the work was taken up and then *Sealing Wax Art* was assigned to be read during the week. A number of pictures were shown to give an idea as to how the

pupils were to go about using sealing wax. It was decided to pay for the sealing wax materials out of the club treasury (two alcohol lamps, as many different colors of foundation wax sticks as possible, and alcohol).

The remainder of the time was spent in painting, paper cutting, and making oil painting designs. Notebooks were handed in for criticism. Some were very good. They brought out the three different departments very clearly.

The club adjourned at 11:45 A.M.

Weekly Report of Arts and Crafts Club
Leader _____

Date April 30

1. Plan for next week
Continuation of wax modeling
2. To-day's aim
To show how to decorate a smooth surface with either a smooth or raised decoration
3. Method
 - (a) Demonstration
 - (b) Practical work — molding wax on vases, jars, and trinkets
4. Report of work accomplished
 - (a) Good questions asked
 - (b) Good contributions
 - (c) Books read and amount of reading done
 - (d) Report of what was done

The Arts and Crafts Club met at the Lincoln building April 30. After the reading of the minutes, the way to decorate a waxed surface and have it remain

smooth was demonstrated. This showed how colors could be blended together to make a very pleasing effect. Then raised designs and flowers were demonstrated. Leaves were also made. This created a keen interest, and some very pretty articles were made, using both methods. It seemed as though everyone disliked stopping work, and all wished for more time. The club adjourned at 11:45 A.M.

PAPER BY ONE OF THE PUPILS

The Club I Belong To

I belong to the Arts and Crafts Club, which is a wonderful club to my notion. Miss —— is the leader.

We made shoe trees, enameled vases, put designs on boxes, painted pictures with a little verse in the corner, made notebooks, and waxed vases. We had candy and sandwich sales to buy the materials for our work. We read articles outside of club time and at the next meeting reported on them. The boys made a cover for a magazine and when that was through they made the index sheet and so on until they got as far as they had time.

I enjoyed it because it was very interesting to find out what you really could do in the way of art. When I entered I thought everything was easy to do, but after I got started I soon changed my mind although I tried my very best in everything and am very proud of the things I made. The things we made were not only useful but pleasing to the eye.

The notebooks were very interesting; they contained several sections, one for commercial art, another for advertisements cut out of magazines, still another for the home, one for self, and one for others. We had to design the cover ourselves and put the name of the club on it.

APPENDIX

RECORD SHEETS FOR INTEREST CLUBS

THE following is the organization of the clubs as arranged after testing. The mean score of the grade, the T score for each pupil, and the club to which each belonged are listed. These scores are taken from the results of the Thorndike-McCall Reading Test. Those who were in the remedial groups are listed at the bottom of each club list. Each section shows the name of the club and the place of meeting. The number "2d" or "3d" after a pupil's name indicates that the club in which he is listed was the second or the third choice of this pupil. His first-choice club was not organized because too few pupils chose it.

ARTS AND CRAFTS CLUB, MISS D____, SEWING ROOM

NAME	MEAN SCORE	T SCORE
M____ F____	58.7	65
B____ B____	58.7	60
D____ S____	58.7	60
V____ C____	58.7	56
V____ P____ (3d)	58.7	52
I____ T____	58.7	73
A____ H____	54.8	60
D____ R____	54.8	56
I____ D____ (3d)	54.8	58
F____ S____ (2d)	58.7	45
J____ G____	54.8	67
P____ C____	54.8	58
E____ G____	54.8	54

ARTS AND CRAFTS CLUB, MISS D____, SEWING ROOM

Remedial Group

NAME	MEAN SCORE	T SCORE
E____ G____	58.7	54
V____ S____	54.8	50
L____ D____	54.8	50
E____ P____	54.8	49
M____ G____ (3d)	58.7	52
L____ J____ (2d)	54.8	52
G____ H____ (2d)	54.8	49
H____ V____ (2d)	54.8	45

MECHANICS' CLUB, MR. _____, MANUAL TRAINING ROOM

W____ C____	58.7	65
C____ S____	58.7	60
E____ B____	58.7	60
H____ S____	58.7	58
D____ T____	58.7	70
K____ D____	58.7	65
R____ K____	58.7	62
W____ K____	58.7	60
H____ Z____	54.8	70
W____ S____	54.8	65
B____ F____	54.8	52
H____ J____	54.8	54
J____ C____	58.7	67
J____ Z____	58.7	58
H____ P____	54.8	67
R____ L____	54.8	60
H____ G____	54.8	56
G____ W____	54.8	54
W____ N____	54.8	54
C____ B____	54.8	

Remedial Group

V____ B____	58.7	54
C____ D____	58.7	52
R____ H____	58.7	47
E____ Z____	54.8	52
W____ B____	54.8	47
R____ W____	54.8	45
R____ R____	58.7	52

MECHANICS' CLUB, MR. —, MANUAL TRAINING ROOM

Remedial Group — Continued

NAME	MEAN SCORE	T SCORE
C___ A___	54.8	52
O___ S___	54.8	52
V___ K___	54.8	45
L___ Z___	54.8	42

NURSES' CLUB, MISS O___, VOCATIONAL SCHOOL

D___ W___	58.7	62
J___ O___	58.7	60
M___ K___	58.7	58
H___ S___	58.7	58
R___ P___	58.7	54
D___ C___	58.7	67
D___ R___	58.7	58
F___ H___	58.7	56
B___ M___	54.8	60
A___ E___	54.8	60
G___ P___	54.8	58
R___ P___	54.8	54
E___ W___	54.8	52
A___ K___	54.8	56
E___ G___	54.8	54
R___ H___ (2d)	54.8	58
C___ S___ (3d)	54.8	60

Remedial Group

M___ H___	58.7	54
H___ M___	58.7	40
D___ R___	54.8	49
L___ K___	58.7	50
V___ K___	54.8	50
H___ B___	54.8	49
M___ K___	54.8	47
E___ C___	58.7	52

FORESTRY CLUB, MR. —, LINCOLN ASSEMBLY ROOM

C___ S___	58.7	62
E___ K___	58.7	60
C___ B___	58.7	62

FORESTRY CLUB, MR. —, LINCOLN ASSEMBLY ROOM

NAME	MEAN SCORE	T SCORE
D— K—	58.7	62
R— M—	58.7	60
W— C—	58.7	60
J— S—	58.7	60
R— K—	58.7	58
G— W—	58.7	58
B— M—	54.8	65
C— M—	54.8	60
D— J—	54.8	58
J— R—	54.8	56
H— R—	54.8	56
R— W—	54.8	58
C— M—	54.8	56
G— M—	54.8	54
J— L—	54.8	54

Remedial Group

W— G—	58.7	56
M— B—	58.7	50
H— Y—	58.7	56
V— B—	58.7	54
W— B—	54.8	50
W— M—	58.7	50
H— K—	58.7	47
M— H—	54.8	50
W— R—	54.8	49

RADIO CLUB, MISS B—, LINCOLN SEVENTH GRADE

N— S—	58.7	62
W— H—	58.7	62
A— S—	58.7	58
C— R— (3d)	58.7	62
A— T—	54.8	60

Remedial Group

J— D—	58.7	56
N— S—	58.7	52
H— H— (2d)	58.7	56
A— B—	54.8	49
C— H—	54.8	50

TEACHERS' CLUB, MRS. —, COLUMBUS KINDERGARTEN

NAME	MEAN SCORE	T SCORE
E___ M___	58.7	67
M___ K___	58.7	62
E___ H___	58.7	62
E___ P___	58.7	60
J___ C___	58.7	60
M___ H___	58.7	54
A___ B___	58.7	50
R___ K___ (2d)	58.7	58
J___ H___	54.8	62
T___ R___	54.8	56

Remedial Group

C___ L___	54.8	47
H___ B___	54.8	49
D___ P___ (2d)	58.7	50
D___ W___ (2d)	58.7	54

SALESMANSHIP CLUB, MISS — AND MISS —, OFFICE

A___ S___	58.7	56
R___ L___	58.7	40
L___ M___ (3d)	58.7	65
O___ P___	58.7	38
R___ E___ (3d)	58.7	70
P___ T___	54.8	62
H___ F___	54.8	54
G___ B___	54.8	52

Remedial Group

W___ W___	58.7	52
G___ D___	54.8	49
F___ J___	54.8	49
H___ R___	54.8	47
E___ W___	54.8	47

NEWSPAPER CLUB, MISS —, COLUMBUS ASSEMBLY ROOM

L___ K___	58.7	62
A___ K___	58.7	60
A___ B___ (2d)	54.8	56
C___ T___	58.7	65

NEWSPAPER CLUB, MISS —, COLUMBUS ASSEMBLY ROOM

NAME	MEAN SCORE	T SCORE
V____ R____	58.7	67
R____ R____	58.7	56
M____ B____ (2d)	58.7	58
V____ O____	54.8	62
E____ Q____	54.8	60
R____ M____	54.8	60
F____ T____ (3d)	54.8	60

Remedial Group

H____ F____	58.7	50
E____ K____	58.7	52
J____ V____ (3d)	58.7	49
C____ H____ (3d)	54.8	43

REMEDIAL GROUPS

Miss —, Eighth North Room

E____ G____	58.7	54
V____ B____	58.7	54
M____ H____	58.7	54
W____ G____	58.7	56
M____ B____	58.7	60
H____ H____	58.7	56
N____ S____	58.7	52
J____ D____	58.7	56
D____ W____	58.7	54
H____ F____	58.7	50
C____ D____	58.7	52
R____ H____	58.7	47
E____ C____	58.7	52
H____ M____	58.7	40
H____ Y____	58.7	56
V____ B____	58.7	54
D____ P____	58.7	50
W____ W____	58.7	52

Miss W____, Seventh Lincoln, Kindergarten Room

E____ Z____	54.8	52
W____ B____	54.8	47
R____ W____	54.8	45

Miss W____, Seventh Lincoln, Kindergarten Room

NAME	MEAN SCORE	T SCORE
D____ R____	54.8	49
W____ B____	54.8	50
C____ H____	54.8	43
A____ B____	54.8	49
C____ L____	54.8	47

Miss H____, Eighth Columbus, Seventh-Grade Room

L____ K____	58.7	50
R____ R____	58.7	52
W____ M____	58.7	50
H____ K____	58.7	47
M____ G____	58.7	56
J____ V____	58.7	49
E____ K____	58.7	52

Miss L____, Seventh and Eighth Columbus, Seventh-Grade Room

V____ S____	54.8	50
L____ D____	54.8	50
E____ P____	54.8	49
C____ A____	54.8	52
O____ S____	54.8	52
V____ K____	54.8	45
L____ Z____	54.8	42
V____ K____	54.8	50
H____ B____	54.8	49
M____ K____	54.8	47
M____ H____	54.8	50
W____ R____	54.8	49
C____ H____	54.8	50
H____ B____	54.8	49
L____ J____	54.8	52
G____ H____	54.8	49
G____ D____	54.8	49
H____ V____	54.8	45
F____ J____	54.8	49
H____ R____	54.8	47
E____ W____	54.8	47

INDEX

- Ability to perceive likenesses and differences, as a fundamental characteristic of gifted pupils, 20; as related to interest, 21; as a condition of the attention, 21; as a condition of logical memory, 23; as related to the organization of thought, 23-24; as related to reflection and foresight, 24; as related to morals, 25; as related to ideals, 25-26; existence of, without strong tendencies toward activity, 26, 53; as related to the naming of opposites, 28; as related to general information, 28; as related to naming missing parts, 29; as related to accurate drawing, 29; as related to the completion of analogies, 29; as related to the perception of relation, 29; as related to the interpretation of pictures, 29-30; as related to the power to generalize, 30-31; as related to mechanical intelligence, 31; as related to social intelligence, 31-32; as related to leadership, 32-33; as related to resourcefulness and adaptability, 33; as related to artistic talent, 33-34; as related to creativeness, 35-37; as related to the curriculum, 40
- Abstract intelligence, tests of, 27-31
- Accidents, treatment in, 292-293
- Activity, suppression of, in many schools, 48-49; need for encouragement of, 49-50
- Advertising, educational value of, 319, 338; history of, 336-337; methods of, 337-339; old-time, 337; ethics of, 337; good style in, 338; editorial, 338; humorous, 339; other items in, 339
- Alexanderson, E. F. W., 213
- Ambridge plan, nature of, 67-69; advantages of, 67
- Artistic talent, nature of, 33-34
- Arts and Crafts Club, outline, 123, 175-179, 374-380; aims, 175, 179, 374; notebooks, 178-179, 380; organization, 374; practical work, 375-380; method, 375; enameling, 375; ribbon art, 375; illustrated card, 376; wax modeling, 377; gesso work, 378; stenciling, 378; block printing, 379; magazine topic page, 379; bibliography, 380; weekly reports, 381-393; paper by pupil, 393
- Assignments, disadvantages of single, 5; failure of, in connection with gifted pupils, 6
- Attention span of the gifted child, 22
- Bailey, D. C., Morrison plan applied to history, note, 65
- Bandaging, 293
- Batavia plan, 61
- Bed bath, 290
- Bed making, 289
- Beecher, Henry Ward, 83
- Bell, Alexander Graham, 210, 211, 216
- Bibliography, Rugg, Harold, 75; Rohan, Ben J., 78; Hammond, J. W., 83; Swift, Edgar James, 83, 85; Smith, William Hawley, 84, 171; Colvin, Stephen S., 88; Van Denburg, Joseph K., 92; Dyer,

- Frank Lewis, 92; Dearborn, W. F., 96; Elliot, E. C., and Starch, Daniel, 96; Hulten, C. E., 96; Dewey, John, 103; Quick, Herbert, 171; Kirkpatrick, Marion, 171; Radio Club, 208-209; Forestry Club, 278-281; Nurses' Club, 287-295; Electric Club, 307-308; Mechanics' Club, 315-317; Salesmanship Club, 328; Teachers' Club, 340-342; Arts and Crafts Club, 380
- Block printing, 379
- Broadcasting stations, 207, 225-226
- Burk plan, 62
- Cartooning, 106
- Caruso, Enrico, 76
- Caste system, efforts of our forefathers to avoid, 17
- Children, types of, 53
- Civilizing agency, radio as, 205-206
- Clubs, eligibility for membership in, 91; entrance requirements for, 114, 129, 131; Salesmanship, 117-118, 164-170, 185-187, 318-329; Teachers', 118, 170-175, 340-373; Radio, 118-119, 145, 195, 231; Mechanics', 119-121, 164, 307-317; Writing and Dramatics, 121; Forestry, 121-122, 157-162, 266-286; Nurses', 122-123, 162-163, 287-306; Arts and Crafts, 123-124, 175-179, 374-393; Newspaper, 124-125, 145-157, 187-189, 232-265; choosing, 126-127; organization of, 127-131, 395-402; remedial work required, 130-131; difficulties, 132-133; leadership, 133-135, 143-145; operation of, 135-141; instructions and reports, 135-141; meetings, 140; purposeful reading, 141, 181-182; as aid in discipline, 182-183; enriched curriculum provided, 183-191; correlation with other subjects, 189-190
- Colvin, Stephen S., 88
- Correlation of club work with other subjects, 189-190
- Curriculum, as related to social survival and progress, 38-39; principles of construction of, 38-55; as related to the needs and interests of the pupil, 39; as related to the capacity of the pupil, 39; as related to social utility, 39; characteristics of, for gifted pupils, 40-55; differentiation for gifted and dull, 51-53
- Curriculum, enriching, 183-191; by utilizing interest, 184; intellectual outcome of, 185; correlations, 185-187; club activities in: Salesmanship Club, 117-118, 164-170, 185-187, 318-319; Teachers' Club, 118, 170-175, 340-373; Radio Club, 118-119, 145, 195-231; Mechanics' Club, 119-121, 164, 307-317; Writing and Dramatics Club, 121; Forestry Club, 121-122, 157-162, 266-286; Nurses' Club, 122-123, 162-163, 287-306; Arts and Crafts Club, 123-124, 175-179, 374-393; Newspaper Club, 124-125, 145-157, 187-189, 232-265
- Customers, studying types of, 319
- Dalton plan, nature of, 66; criticism of, 66-67
- Dancing, 107-108
- Darwin, Charles, 83
- Daydreaming, value of, 41-42
- Dearborn, W. F., 96
- Democracy, principles of, 13-14, 18, 56-57; conflicting ideals of, 14-15; social classes in a, 17
- Dewey, Evelyn, Dalton plan, note, 66
- Dewey, John, 103
- Differentiated assignments, sample of, 68-69
- Discipline, aids in, 182-183
- Double track plan, 59
- Dramatics, 109
- Dyer, Frank Lewis, 92
- Edison, Thomas, 92-93, 211-212
- Electric Club, 307-308; history of electricity, 307; fundamentals of,

- 307; uses of, 307; sources of, 308; developments, 308; new uses, 308; bibliography, 307-308
- Elliot, E. C., and Starch, Daniel, 96
- Enameling, 375
- Environment, as affecting the gifted, 50-51; as affecting the dull, 54
- Equality, as a principle of democracy, 14; limitations of, 14; as a fundamental in the creed of the common man, 15-16; of opportunity, 15, 56
- Excursions, 294
- Exploration, need for, 44-47; relation of, to guidance, 44; superficial, 45-47; as related to play, 46; mistakes concerning, 46-47
- Fausold, Samuel, 67-69
- Fessenden, R. A., 212, 213
- Forestry Club, outline of work, 121, 157-162, 266-269; origin, 157; organization, 158; activities, 159-160; letters, 160-162; secretary's minutes, 269-278; bibliography, 278-281; reading done, 281-284; paper by club member, 284-286
- Frequency alternator, radio, 213
- Fulton, Robert, 83
- General intelligence, types of, 27
- General tendencies toward activity, as a fundamental characteristic of gifted pupils, 20, 26; existence of, without the ability to perceive likenesses and differences, 26, 53
- Genius, neglect of, 57; encouragement of, needed, 76-77, 82-84; effect of school organization on, 84-85; unexpected origins of, 87-88
- Gesso work, 378
- Gifted children, neglect of, 3-4, 57-58; improper assignments to, 6; reasons for neglect of, 8-12; in monitorial schools, 9; as affected by conflicting ideals of democracy, 16; rights of, 16; need for the education of, 18-19; characteristics of, 20-22, 35; need of rich and varied curriculum by, 40-41; failure of teachers to recognize, 40-41, 82-84; and daydreaming, 41-42; need of relief from monotony, 43; need for opportunities in exploration, 44; need of guidance for, 44-47; need of activity for, 47-50; need of a stimulating environment for, 50-51; care of, in Europe, 51; administrative procedures of value to, 58-74; number of, in our schools, 75; identification of, 80-97; class standings as aid in discovering, 82-86; problem of developing, 85; value of class records in discovering, 85-87; standard tests as aid in discovering, 87-91; teaching methods as related to, 91-95; teachers' judgments as factor in selecting, 95-97; education of, 113-141
- Goldsmith, Oliver, 83
- Grid audion, 213
- Group plan, constant and shifting, 59-60
- Haggerty Intelligence Test, 90
- Hammond, J. W., 83
- Harris plan of rapid promotion, 58
- Heaviside, A. W., 211
- Henry, Patrick, 83, 85
- Hobby, possession of, by almost every child, 106-107; method, 113-114; finding a, 114-128
- Holmes, W. H., plans of promotion, note, 58
- Hulten, C. E., 96
- Hunter, John, 85
- Hygiene, personal, 288
- Ills, common, treatment of, 292-293
- Incentives as aid in arousing interest, 131, 146
- Indefinite perfectibility, as a principle of democracy, 14, 56; as applied to social classes, 17
- Individual instruction, in early times, 9; the plans of Burk and Washburne, 62-63; criticism of, 63-64
- Inertia, school procedure influenced by, 8

- Intellectual differences, magnitude of, demonstrated, 4-5; provision for, in assignments, 7, 11
- Intelligence, hypothesis concerning the nature of, 20-21, 37; types of, 75-76; need of mental food for, 78-80; as possibility for evil and good, 79-80
- Intelligence tests, as measure of abstract intelligence, 27; characteristics of, 27-31
- Interest, encouragement of, 77-80; as sign of intelligence, 80; home stimulation of, 80-81; price of, 81; nature's way of stimulating growth of, 81-82; teacher's influence on, 99-100; extracurricular activity as key to, 100-103; prevalence of, 103-105; types of, 104; as an educational problem, 105; report method of finding, 105-109, 114-116; free association method, 110-111; inventory method, 111, 116-128; other methods, 111; influence of, 190-191
- Jesso work, 378
- Kirby Grammar Test, 90
- Kirkpatrick, Marion, 171
- Laissez faire* policy, evils of, in education, 19, 57
- Liberty as a principle of democracy, 14
- Like-mindedness as a principle of democracy, 18
- Lindbergh, Charles, 85
- Lowell, James Russell, 83
- Marconi, Guglielmo, 216-219
- Martineau, Harriet, 83
- Mechanical intelligence, tests of, 31
- Mechanics' Club, outline of work, 119-120, 164, 307-317; Electric Club, 307-308; mechanics' division, 308-309; Woodworking Club, 309-310; history of machinery, 308; metals, 308; raw material in its relation to factories, 308-309; projects, 309; organization and work, 310-317; weekly reports, 311-315; bibliography, 315-317
- Monitorial schools as forerunners of present schools, 9
- Morrison plan, nature of, 64-65; criticism of, 65-66
- Morse, Samuel F. B., 210, 214-216
- Napoleon, 83
- Narrowly talented persons, nature of, 34-35; number in comparison with people of the all-around type, 35
- Newspaper Club, outline of work, 124-125, 232-235; practical experiences provided by, 146-157, 188-189; letters, 147-149, 150-152; finances, 149-150; advertising, 152; subscribers' interest, 153-154; organization, 154; influence, 154-157, 187-188; organization, 232-233; aims, 233-234; special projects, 234-235; weekly reports, 235, 243; the newspapers, 244-265
- North Denver plan, 59
- Nurse, qualities desired in, 291
- Nurses' Club, outline of work, 122-123, 162-163, 287-295; place of meeting, 162; organization, 287; personal hygiene, 288; choice of patient's room, 289; bed making, 289; bed bath, 290; temperature, pulse, and respiration, 291; qualities of nurse, 291; accidents and common ills, 292-293; artificial respiration, 293; bandaging, 293; excursions, 294; bibliography, 294-295; weekly reports, 295-306
- Outcomes of club work, 180-191
- Paderewski, Ignace, 76
- Personality, salesman's, 329
- Portland plan, 59
- Preece, Sir William H., 211
- Prejudice, school procedure affected by, 10-11

- Problem method, 70; sample forms of, 71-74
 Project method, nature of, 70; criticism of, 70-71
 Promotion, plans of, 58-60
 Public service, radio as form of, 294
 Pulse, 291

 Quick, Herbert, 171

 Radio Club, outline of work, 118-119, 145, 195-196; purpose, 195; method, 195; order of business, 195; lesson topics, 196; weekly reports, 196-200; club minutes, 201-202; outline of study, 202-209; radio development, 202-203, 209-214; inventors, 203; public service, 204, 219-221; entertainment, 205, 221-222; civilizing agency, 205-206; use of radio on ocean, 206, 222, 225; future possibilities, 206, 222-223, 226-230; broadcasting stations, 207, 225-226; bibliography, 208-209; papers by club members, 209-230; Edison, 211; Marconi, 212-214, 216-219; articles read, 230-231
 Rapid promotion, originated by Superintendent Harris, 58; modifications of, 58-60; disadvantages of, 60-61
 Reading, purposeful, 141, 181-182, 189-190, 281-284, 342
 Reading speed, test of, 4-5
 Recess, directed activity during, 79
 Recitation, waste of time in, 6-7
 Report method of finding interest, 105-109, 114-128
 Respiration, 291; artificial, 293
 Ribbon art, 375
 Rohan, Ben J., 78
 Room, choice of patient's, 289
 Rugg, Harold, 75

 Salesmanship Club, outline of work, 117-118, 318-319, 329; time of meeting, 164; assignment, 164-165; sales, 165-168; motto, 167; aim, 168; essentials of salesmanship, 169; practice in salesmanship, 169-170; correlation, 185-187; how business can be built, 318; health of salespeople, 318; appearance of salespeople, 318; care, arrangement, and display of merchandise, 318; how to conduct a sale, 319; value of advertising, 319; types of customers, 319; weekly reports, 319-327; bibliography, 328; salesman's personality, 329; salesman's qualifications, 330-335; merchandise information, 333-334; advertising, 335-339
 Santa Barbara plan, time as variable in, 58-61; instruction as variable in, 61-63
 Schools of the present, inertia in, 8; as outgrowth from monitorial schools, 9-10; prejudice in, 10-11; function of, 11-12; avoidance of lock step in, 12
 Schumann-Heink, Ernestine, 76
 Search plan of promotion, 62
 Seashore Music Test, 87
 Seward, William H., 83
 Shearer plan of promotion, 59
 Smith, William Hawley, 84, 171
 Social intelligence, characteristics of, 32
 Spaulding plan of promotion, 62
 Standard tests, use of, in discovering gifted children, 87-91; Thorndike-McCall Reading Test, 90, 91; Stone Reasoning Test, 90; Haggerty Intelligence Test, 90; Kirby Grammar Test, 90
 Steinmetz, C. P., 83
 Stenciling, 378
 Stone Reasoning Test, 90
 Swift, Edgar James, 83, 85

 Teachers' Club, outline of work, 118, 170-175, 340-343; aim, 170-171; visiting schools, 171, 342; experiences, 172-175; technique of teaching, 340; influence of teacher, 340; lives of worth-while people,

- 341-342; bibliography, 340-343; observation in grades, 342; reading chart, 342; officers, 342; weekly reports, 343-366; number of meetings, 366-367; papers by pupils, 368-373
- Teachers' judgment, inaccuracy of, 40, 61-62
- Telegraph, 210, 214-216
- Telephone, 210, 216
- Temperature, 201
- Terman, Lewis M., on the value of teachers' judgments, 40
- Thorndike-McCall Reading Test, 90, 91, 128, 131
- Trowbridge, John, 210
- Vacuum tube, 213
- Vail, Alfred, 215-216
- Van Denburg, Joseph K., 92
- Van Sickle plan of promotion, 59
- Washburne plan of individual instruction, 63
- Wax modeling, 377
- Whipple, G. M., analysis of unsocial style, note, 34
- Winnetka plan, 63
- Wireless telegraphy, 209-210; Samuel F. B. Morse, 210; John Trowbridge, 210-211; A. W. Heaviside, 211; magnetic induction, 211; Thomas A. Edison, 211-212; Fessenden, R. A., 212; radio frequency alternator, 212; generators, 213; liquid receivers, 213; grid audion, 213; vacuum tube, 213; Guglielmo Marconi, 216-219
- Woodworking Club, man's dependence on wood, 309; source of supply, 309; woodworking industries, 309; finishing process, 310; projects, 310
- Writing, 106, 109, 121

